

From qrp-request@Think.COM Wed May 12 14:04:17 1993
Date: 12 May 1993 14:03:21 -0500 (EST)
From: "D A Coleman (ext. 2850)" <DACOLEMAN@fair1.fairfield.edu>
Subject: "/qrp"

I'm a new qrp-er on the list. I'd like to second the gent who says he likes using "/qrp" after his call. I recently found, for instance, that a French station got a big kick out of responding to my three-watt signal on 17 meters when I signed "/qrp."

I think it's valuable to have qrp recognized in situations like that one.

73

Don Coleman, W1V0Q

From qrp-request@Think.COM Wed May 12 11:29:55 1993
Date: Wed, 12 May 1993 08:25:24
From: hlester@as.arizona.edu (Howard Lester)
Subject: /qrp

When I run 50 - 100 watts:

When I hear a weak signal calling CQ (or answering MY CQ) with a "/qrp" after the call sign, I'm much more willing to answer it. For one, it's a challenge; two, I feel as if I'm helping the QRP station out by at least letting him know he's getting out and that we CAN carry on a QSO...And three, I still think it's amazing.

I like to listen to the DX beacons on 14.100 to see what the differences are among the output powers. (Each of the 9 stations sends a tone at 100, 10, 1, and 1/10 watt.)

Howard

From qrp-request@Think.COM Wed May 12 16:44:39 1993
Date: Wed, 12 May 93 15:44:49 -0500
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: /qrp

was there something about qsl cards requiring /qrp on your call to be valid for the awards? way back when, i think there was a rule. discussion going on now among QRP ARCI about even the need of qsl cards. i know that getting qsl cards today is different than when we did it 25 or 30 years ago. (it was easier then)

72 de k5fo/5 dit dit (working 4's like crazy on 20meters yesterday)
OHR 20 mtr qrp rig. tonit 10 meters HW-9 0100z

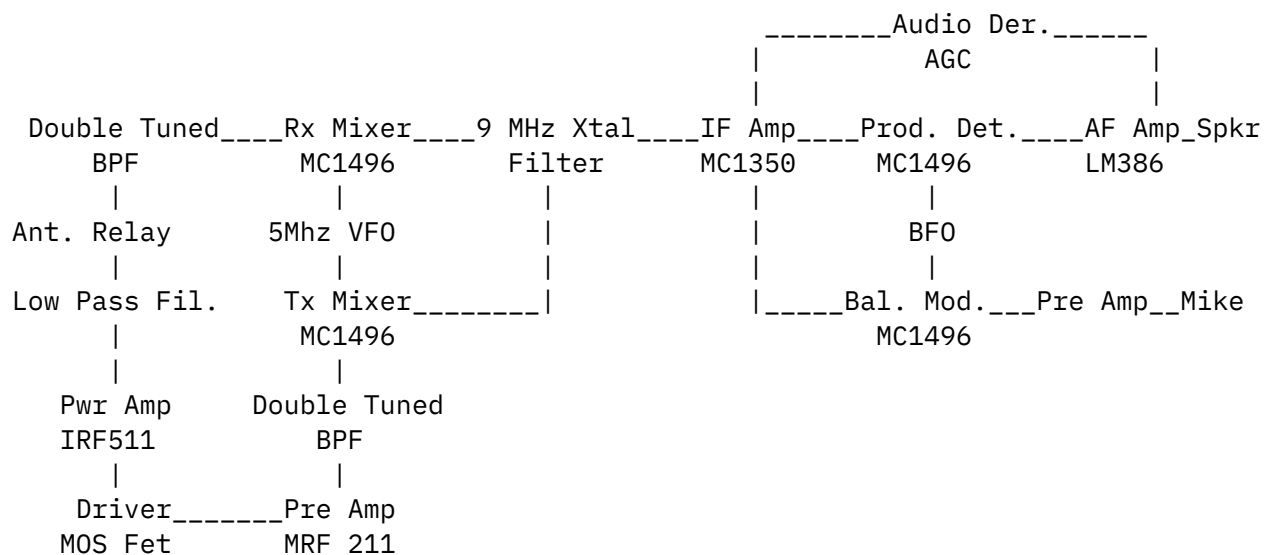
Chuck Adams, K5FO @ 70+ wpm cw
adams@sgi.com

From qrp-request@Think.COM Tue May 11 10:45:47 1993
Date: Tue, 11 May 93 09:13:45 EDT
From: epacyna@auratek.com (Edward Pacyna)
Subject: 20M SSB Transceiver

Some folks asked for more details on the 20M SSB transceiver I've put together.
I'm not sure whether or not I sent the attached file before, so please excuse
if its a repeat.

Ed W1AAZ

Here is a quick round down on my homebrew 20M SSB transceiver.



Hopefully the above is worth a thousand words. As you can see the receiver is
just (4) IC's. The Xtal filter is a commerical unit (6 pole 2.4KHz BW). T/R
control is PPT. The entire transceiver (except Tx power amp) is on a PCB about

6" x 5". Never got around to putting it all in a box (yes my QSO's were made with just the PCB's on the bench). When I get around to it I've got a TenTec TG28 (8"w x 6"d x 2"h) set aside. The power amp in on a 2" x 4" PCB and will go on the outside back panel w/ a heat sink. The transmitter is (3) IC's plus (3) MOS Fet amps. The VFO is (2) FET's and the BFO (1) FET. Tuning range is currently 14.15 - 14.35MHz with a 6:1 reduction drive.

Although I've worked a fair number of stations (including Europe) with the 1 watt output, I am considering another power amp circuit at 5W. The driver is capable of up to 300Mw output (and can be reduced by turning down the gate bias pot.).

Be happy to answer any specific questions.

73's Ed

From qrp-request@Think.COM Mon May 10 16:43:12 1993
From: Kevin Purcell (Rho) <a-kevinp@microsoft.com>
Date: Mon, 10 May 93 13:40:52 EST
Subject: 30m DXCC?

I asked the ARRL folks about 30m DXCC -- the question and reply are below.

So the bottom line:

1. You can use 30m QSOs for mixed or CW DXCC
2. You can't get a band endorsement for 30m.

I think I'm finally clear on this.

72

Kevin Purcell N7WIM / G8UDP
a-kevinp@microsoft.com

"So much is happening in the world of electronics, but it appears to me that we QRPers are twenty years behind in the analog age."

-- QRP Quarterly Editorial, April 1993

Sorry to bother you but I'm trying to settle the discussion of single band DXCC on 30m.

Are 30m QSOs valid for single band DXCC?

It seems the QRP Companion (an ARRL publication) says no but the ARRL

Operating manual is quiet on this point, which I presume means that 30m QSOs are acceptable for DXCC.

Sorry to waste your time on a trivial point,

72

Kevin Purcell N7WIM / G8UDP

From: Tammy-Beth Zimmerman KA1WWP <netmail!tzimmer@arrl.org>
To: Kevin Purcell (Rho)
Subject: Re: 30m DXCC?
Date: Monday, May 10, 1993 1:21PM

To: N7WIM

Hi Kevin,

It's not a trivial point really.

30 meter contacts are good for Mixed or CW DXCC only.
There is no band award, it is not an endorseable band for 5Band DXCC.

73,

Bill Kennamer K5FUV
DXCC Specialist

From qrp-request@Think.COM Thu May 13 23:34:37 1993
From: mvjff@mvubr.att.com
Date: Thu, 13 May 93 07:52 EDT
Subject: 72

I listened for Chuck KF50, last nite on 20 M. at 0100 Z.
No luck.
I did work KC4ZSQ/QRP, although conditions were variable.

W7 and W0 and W4, and an S51 stations were coming
in very well.

I may try 20m again tonight (Thurs.) just before the
QRP-NE sprint on 3.579 MHz from 0100 - 0200 Z

Last Thurs, about 7 of us had a ball with Colorburst
xtal rigs. Pulling the freq. with a variable capacitor,
there was room for all. It seems that every officer in
QRP-NE was on. It is easy to tell the Colorburst rigs,
with the hard keying and very slight musical tone - HI !

72 Jim, W1FMR

From qrp-request@Think.COM Fri May 14 11:19:41 1993
Date: Fri, 14 May 93 08:14:06 PST
From: Rob_Ontiveros_at_Notes-Gate@sceng.UB.com
Subject: ARCI HOOTIN QRP CONTEST

Hi All,

Does anyone know what the ARCI qrp hootin contest is about and freqs?

73 de KC6ZTT
Rob

From qrp-request@Think.COM Fri May 14 13:04:57 1993
Date: Fri, 14 May 1993 10:04:53
From: hlester@as.arizona.edu (Howard Lester)
Subject: Re: ARCI HOOTIN QRP CONTEST

> Hi All,

> Does anyone know what the ARCI qrp hootin contest is about and freqs?

Maybe we all get on SSB and make loud hooting sounds. That way, we sound
like, uh, 'freqs'(sic).

:) C'mon. folks, it's Friday!

From qrp-request@Think.COM Tue May 18 10:36:46 1993
Date: Tue, 18 May 93 14:36:10 GMT
From: PENC@psumeteo.psu.edu
Subject: Book info

Having recently rekindled my interest in QRP operation, I am upgrading my
QRP library. Was wondering if the current (1986) version of the ARRL book

"Solid State Design for the Radio Amateur" has been upgraded from the 1977 version I have in my library? Or is it a reprint verbatim of the same without any updates? Perhaps an "old timer" who has both can comment.

Thanks es 72,
Rich WK2A

From qrp-request@Think.COM Tue May 18 18:41:10 1993
Date: Tue, 18 May 93 21:07:16 GMT
From: jkearman@arrl.org (Jim Kearman)
Subject: Re: Book info

PENC@psumeteo.psu.edu writes:

>Having recently rekindled my interest in QRP operation, I am upgrading my
>QRP library. Was wondering if the current (1986) version of the ARRL book
>"Solid State Design for the Radio Amateur" has been upgraded from the 1977
>version I have in my library? Or is it a reprint verbatim of the same without
>any updates? Perhaps an "old timer" who has both can comment.

>

>Thanks es 72,
>Rich WK2A

>

>

>

Perhaps an old timer who works at the League will comment. :+}

There have been no changes since the 2nd printing, way back in the 70s. Someday, there may be a new edition.

73,

Jim, KR1S
Asst Technical Editor, ARRL

--

You know you're getting old when the new rig you had as a Novice becomes a collector's item.

jkearman@arrl.org WN2EDW 1962 - KR1S 1993

From qrp-request@Think.COM Wed May 19 18:56:24 1993
Date: Wed, 19 May 93 18:01:38 GMT
From: jkearman@arrl.org (Jim Kearman)
Subject: Buying Parts

Jeff, AC4HF (how much you haveta pay for that call, Jeff? :>)
writes:

>Anyone know where I might be able to get hold of a single
>PT5741 transistor (power transistor for Ten Tec 405 amp) or
>equivilent. RF has them but.. has \$20 min. order.

>

>thanks

>

>73

>

>Jeff,AC4HF

>

>

This message points out the need for local homebrew clubs.
There must be clusters of homebrewers in most areas of the
country. Homebrew forums at hamfests are a good way to meet
others. Going in on bulk purchases is a good way to get
better prices and meet the increasing minimum orders of
suppliers.

Meanwhile, Jeff, have you tried Ten Tec direct?

From qrp-request@Think.COM Wed May 26 00:55:26 1993
Date: 26 May 93 00:51:47 EDT
From: William Ruppert <70730.2503@CompuServe.COM>
Subject: Cases for AEA/Mizuho HF Hand helds

Hello to all fellow QRPers

To all users of the AEA 10 and 6 meter DX Handy talkie or any of Mizuho HF
hand helds, I have had leather cases for these radios made and they are
available now. These cases are hand made of black leather and I have had them
custom built for these radios. The cost of the case is \$20.00 .

They are beautifully made and a great way to protect your HF hand held.
I have a collection of about 25 Mizuho SSB/CW HF HTs on bands from 80 thru 2
meters, and wanted a quality leather case for them. I have found people here
in Chicago to make them and thought I would pass the info on.

To order the case please send a check for \$20.00 plus \$3.50 for shipping to my
address below.

That is a total of \$23.50. If your radio is a Mizuho please include which
model you have. The model number is on top (MX-?).The older Mizuho radios have
the push to talk located in a different spot and the case has to be made with
that in mind. All the AEA DX Handy radios are the same as the newer Mizuhos.
Don't forget to include your address as well.

Bill Ruppert WB9BQG
334 Taft Ct.
Glenview, Il 60025
USA Tele# 708-998-9802

From qrp-request@Think.COM Thu May 13 15:24:23 1993
From: jpo@acd4.acd.com (Jim Osburn)
Subject: Clubs near Indianapolis
Date: Thu, 13 May 93 13:01:43 EST

Are there any QRP clubs in the Indianapolis area?
Who can I contact?

Thanks,

Jim, WD9EYB

From qrp-request@Think.COM Thu May 20 08:06:43 1993
From: mvjff@mvubr.att.com
Date: Thu, 20 May 93 08:04 EDT
Subject: Colorburst

Gang,
I have made copies of the 80m Colorburst rig Schematic
and building instructions. Circuit board is available
from FAR circuits.

Send me a legal size (9.5") SASE for a copy.

W!FMR
[A[A[BW1FMR
Box 2226
Salem NH 03079

72 Jim

From qrp-request@Think.COM Thu May 20 14:49:11 1993
From: mvjff@mvubr.att.com
Date: Thu, 20 May 93 14:14 EDT
Subject: Colorburst again

My Adr was garbled, so I am re-sending this info.

Gang,

I made copies of the QRP-NE club project - 80m "Colorburst" crystal controlled transmitter schematic, pwb, lay-out and building instructions.

The circuit board is available from FAR circuits.

Send me a legal size (9.5") SASE for a copy.

W1FMR
Box 2226
Salem NH 03079

72 Jim

From qrp-request@Think.COM Wed May 26 17:25:18 1993
From: mvjfm@mvubr.att.com
Date: Wed, 26 May 93 15:08 EDT
Subject: Colorburst again

For those needing it;

QRP-NE Colorburst 80m transmitter Schematic
corrections and additions:

The only error on the schematic is the note at the bottom which explains how to choose the FET gate bias resistor.

The instruction should read:

Remove or short the crystal and key the transmitter, then select the gate resistor for 30 mA of drain current.

Also, a word of caution about the value of L5.

Turns may have to be removed or added to L5 with your particular colorburst crystal.

If your crystal does not oscillate, try shorting out L5.

With L5 as shown in instructions, I tried 10 crystals in my rig, and got VX0 spreads varying from 2.0 Khz (min) to 3.0 Khz (max).

Turns may have to be removed or added to L5 with your particular colorburst crystal.

If your crystal does not oscillate at all, try shorting out L5.

The IRF511 is the superior output device, and is available at Radio Shack for about \$2.

72, Paul and Jim

From qrp-request@Think.COM Tue May 18 02:59:55 1993
From: mvjif@mvubr.att.com
Date: Mon, 17 May 93 14:34 EDT
Subject: Colorburst Sprint

A reminder: Get on 80m CW on Thursday evenings!
Use any rig you have & work the gang.

If you are not in the New England area, start a colorburst special project and involve the QRPers in your area. Get ready for fall sprints.

The QRPers in your club will love building a rig. Great 1st project, and lots of fun.

QRP-NE - COLOR BURST SPECIAL : MAY DAZE SPRINT

Each Thursday evening in May
9-10 pm EDT
3.579 Mhz +/- VX0, (TV Colorburst Crystal Frequency)

Exchange:

RST, X "X" if you are xtal control.

NE # QRP-NE number, if you are a member.
Name If you have one
PWR Output power

Call "CQ NE" or "CQ QRP NE"

QSOs are cumulative.
ie.... Work the same station on subsequent Thursdays.

Warning..... W1AW comes on at 10:00 pm. (3581 kHz)

Send Logs/comments/gripes to:

Jim Kearman, KR1S
83 Main Street Apt 13C
Newington, CT 06111
or email

72,

Jim

--
jkearman@arrl.org

De: W1FMR

PS... With a simple, tiny, 1 watt, battery powered, 2 transistor,
xtal controlled transmitter, I worked 7 QRP stations on the
first Thursday, and 9 on the second.

Transmitter was the "Universal QRP Transmitter", page 26,
of "Solid State Design for the Radio Amateur" by ARRL.

(Not sure, but the circuit may also be in all ARRL Handbooks)

From bruce@Think.COM Tue May 18 13:04:40 1993
From: Bruce Walker <bruce@Think.COM>
Date: Tue, 18 May 93 13:04:38 EDT
Subject: Colorburst Sprint

Date: Tue, 18 May 93 11:34:10 -0500
From: adams@chuck.dallas.sgi.com (Charles Adams)

do you get TVI, not on the TV but on your receiver if the neighbors
have their tv on? i haven't turned on a rcvr to 3.579MHz lately, but

i'd think that it'd be very noisy there.

I haven't found this a problem at all; when I first listened on the frequency, I expected to hear the TVs there, but I haven't noticed it even with TVs on in the house.

back to 3.579, QRN must be terrible this time of year. 40M is bad enuff for my sensitive ears....

That much is true: This isn't the nicest time to listen to 80m, with all the spring thunderstorms across the continent. With my new longwire (~375' long up 70'), I have often have S9 QRN.

--bruce WT1M (new QRP-NE #180, CU on Thursday!)

From qrp-request@Think.COM Tue May 18 12:34:39 1993
Date: Tue, 18 May 93 11:34:10 -0500
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: Re: Colorburst Sprint

Gang,

in addition to replying to Jim Kearman's post on the QRP NE DAZE thing, i thought i'd post to the group too. just when you thought i had gone away.... ;-)

do you get TVI, not on the TV but on your receiver if the neighbors have their tv on? i haven't turned on a rcvr to 3.579MHz lately, but i'd think that it'd be very noisy there.

does someone like FAR Circuits have a board. i have this thing about ugly construction. just bought the June '93 issue of '73 Amateur Radio Today' and it has cover story on PC Board Layout Tips. the cover photo has some real nice looking boards. thought i might give it a try.

anyone doing board layouts in this group? i'm sure there has got to be someone. how about you Ed P.? i have Tango Schematic but not the router. (what, you think i'm rich? not likely.... ;-)

back to 3.579, QRN must be terrible this time of year. 40M is bad enuff for my sensitive ears....

72 de k5fo dit dit

Chuck Adams, K5FO @ 70+ wpm cw
adams@sgi.com

From qrp-request@Think.COM Tue May 25 15:56:31 1993
From: jpo@acd4.acd.com (Jim Osburn)
Subject: Contest
Date: Tue, 25 May 93 14:37:43 EST

Isn't there a QRP contest coming up this weekend, The Hoot Owl Sprint?
Are any of you going to participate?

I've never been in this particular contest, what's it like?
Is it like the North American Sprint where stations disappear while
you're still trying to figure out if that was a U or a V in the call sign?

Thanks,

Jim, WD9EYB

From qrp-request@Think.COM Mon May 10 16:22:45 1993
Date: Mon, 10 May 1993 15:11:00 +0000
From: "Michael (W.M.) Babineau" <babineau@bnr.ca>
Subject: D-Cells as a QRP Power Source ?

Can anyone relate their experiences using D-Cells (either alkaline or
Nicads) as power sources for QRP gear?

Is this cost effective?

What kind of amp/hr rating can I expect, especially from D-Cell Nicads ... or
should I just forget about this and go the gel-cell route?

I've used 6v lantern batteries in the past, they work well, last a while, but
are somewhat expensive and not environmentally friendly (ie not rechargeable).
I have also used a 12V motorcycle battery, which I would occasionally put on a
charger ... not too portable unless it's attached to a motorcycle.

From past experience (ie several different power supplies) I have found that
batteries make for a much more pleasant experience when using a DC-receiver.

Michael - VE3WMB

From qrp-request@Think.COM Wed May 12 23:10:31 1993
Date: Wed, 12 May 1993 20:06:10 -0700 (PDT)

From: stark <mswmod@sage.unr.edu>
Subject: Driving to Idaho

Hi all,

I will be driving to Idaho on the morning of 13 May 93.

Will start out at about sun up. 0600 local time. Will be
on 7040 at first and then move up to 30 and then 20.

Will do the return trip next tuesday am.

Hope to chat with a few of you.

Have fun,

Ron, KU7Y/M

From qrp-request@Think.COM Wed May 19 11:07:35 1993
Date: Wed, 19 May 1993 10:34:00 +0000
From: "Michael (W.M.) Babineau" <babineau@bnr.ca>
Subject: re:Lectrokit Spider Review

Does the "Spider" have a DC receiver or is it Superhet? I would assume that
you have an RIT or is the XMIT/RCV offset fixed?
How many Xtals can it accomodate? Does the kit include any crystals?

I would assume that a VXO mod to allow you to vary the XMIT freq a bit would
be fairly easy?

Michael - VE3WMB

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+++++
|Michael Babineau          | BITNET: babineau@BNR.CA          |
|Bell Northern Research Ltd.| UUCP  : ..!uunet!bnrgate!bmerh812!babineau |
|Ottawa, ON. CANADA       |      ..!psuvax!BNR.CA.bitnet!babineau  |
+++++
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From qrp-request@Think.COM Thu May 13 16:49:25 1993
Date: Wed, 12 May 93 19:19:47 GMT
From: jkearman@arrl.org (Jim Kearman)
Subject: European Competition

One of the benefits of League employment is the chance to see Amateur Radio publications from around the world. In the March, 1993 issue of _QTC_, the SSA (Swedish equivalent of ARRL) journal were these results of a year-long operating activity by the Scandinavian CW Activity Group (SCAG). The home QTH of each station was also listed, but I haven't included it.

The numbered columns are: DXCC (number of ARRL DXCC band countries worked); G-QRP/SCAG (number of G-QRP/SCAG members worked (I believe they can count a member once per band); POINTS (cumulative total).

Scandinavian CW - Activity Group
SCAG QRP CUP 1992

No	Station	DXCC	G-QRP	SCAG	POINTS
1	SM6SLC	178	303	118	599
2	SM6MDX	99	292	65	456
3	SMSCCT (sic)	125	145	40	310
4	SM5DQ	87	115	46	248
5	OZ1JVN	99	109	32	240
6	SM7DRH	46	143	12	201
7	SM7KJH	78	92	21	191
8	SM7BNG	55	96	19	170
9	SM7RTQ	71	56	13	140
10	SM0MIY	31	81	12	124
11	OZ9AEC	69	36	17	122
12	SM6BHQ	42	44	25	111
13	SM3NTB	45	42	14	101
14	SM7UCZ	31	33	11	75
15	LA3CG	18	48	6	72
16	SM6EWX	22	41	7	70
17	SM3BF	56	3	10	69
18	OZ1BXM	29	18	2	49
19	SM3EQF	29	7	0	36
20	SM7SHF/6	33	0	1	34
21	OH2MHW	17	9	4	30

If we could get all the North American clubs organized, we could do this here. MI + NE + NW + St Louis + ? = total. No QSLs, honor system only. Any St Louis or NW QRP Club members on here?

72,

Jim, KR1S

--

You know you're getting old when the new rig you had as a Novice becomes a collector's item.

jkearman@arrl.org WN2EDW 1962 - KR1S 1993

From qrp-request@Think.COM Mon May 10 14:20:32 1993
Date: Mon, 10 May 93 15:15:15 GMT
From: jkearman@arrl.org (Jim Kearman)
Subject: Flea Market Goodies

Well, Jeff isn't the only person who brought lots of good stuff home from flea markets this weekend. The best way to learn about that filter is to play with it, Jeff. You'll find the PEAK feature most useful on CW, and the other modes most useful on SSB.

We had our big Spring hamfest in New Hampshire Saturday. It was in a new location, not the original "Deerfield." The organizers would have helped matters enormously by putting up some signs to direct traffic, and keeping the talk-in frequency clear! Once you got there, though, it was pretty good. The weather was GREAT!

I haven't seen so many BC-221 and LM frequency meters at one hamfest in 20 years! Lots of "heavy metal" gear. There were some Argos there on Friday, I'm told. I never found the place Friday night, but I wasn't in the market for one, anyway. For once, I found every item I was looking for, and at reasonable prices.

The only QRP gear I bought was a Kantronics "Rockhound." Were these made for various bands? There's no telling what band it's for from the outside. The seller didn't know. Info would be appreciated.

I also bought a device labeled "The Windjammer." Any guesses?

72,

Jim, KR1S

--

You know you're getting old when the new rig you had as a Novice becomes a collector's item.

jkearman@arrl.org WN2EDW 1962 - KR1S 1993

From qrp-request@Think.COM Thu May 13 16:49:23 1993
Date: Thu, 13 May 93 13:07:55 GMT
From: jkearman@arrl.org (Jim Kearman)
Subject: Flexible Solar Panels

"Fred Cady ieeefc@msu.oscs.montana.edu" <fred_c@ece.ee.montana.edu>
writes:

<Deleted ecstasy over finding a smoked, WARC-less HW-9. QRPers
are weird!>

>

>Also, I saw Pete Hoover's qrp portable rig at Visalia. Neat job and
>he had a flexible solar panel. Pete, are you a member of this august
>group? I would like to find out what Pete is using and what the
>source of supply for that panel would be. I think it was an
>amorphous type with about 1-2 amp capacity.

>

Mike Bryce, WB8VGE, QRP columnist for _73_, runs a solar-power
business. I think he has flexible panels. Write him at:

2225 Mayflower NW
Massillon, OH 44646

Mike's station and much of his other electrical needs are
fulfilled by solar-panel-charged batteries.

<Deleted remarks about grizzlies>

>

>73, Fred KE7X

>

72, Jim, KR1S

--

jkearman@arrl.org

From qrp-request@Think.COM Fri May 14 08:13:05 1993
Date: Fri, 14 May 93 08:12:56 -0400
From: jrj@mbunix.mitre.org (James R. Johns)
Subject: Flexible Solar Panels

I purchased a 22 Watt Uni-Solar flexible solar panel from Antennas West at the Dayton Hamvention. I'm using it with a Sun Selector M-8 charge controller to charge both 7 & 24 AH Gel Cells. No problems to date but the panel needs some form of support if you want to elevate it (about 64 degrees here in Massachusetts) to maximize the panel's output. It will roll into a tube about 6" or so in diameter so it can be carried portable without much effort. I know of two sources for the Uni-Solar panels:

Antennas West and Real Goods

Antennas West
P.O.B. 50062
1500 North 150 West
Provo, UT 84605
801-373-8425

Real Goods
966 Mazzoni Street
Ukiah, CA 95482
800-762-7325

Both organizations offer panels, regulators and 12 Volt operated fluorescent lamps. (I am using the 7 Watt unit from Antennas West and it does a great job of illuminating my shack at night and only requires about 600 to 700 mA of current at 12 Volts.)

The usual disclaimers apply. I have no interest in either of these companies or the products they carry.

Jim Johns
KA0IQT
jrjohns@mitre.org

From qrp-request@Think.COM Tue May 11 12:41:43 1993

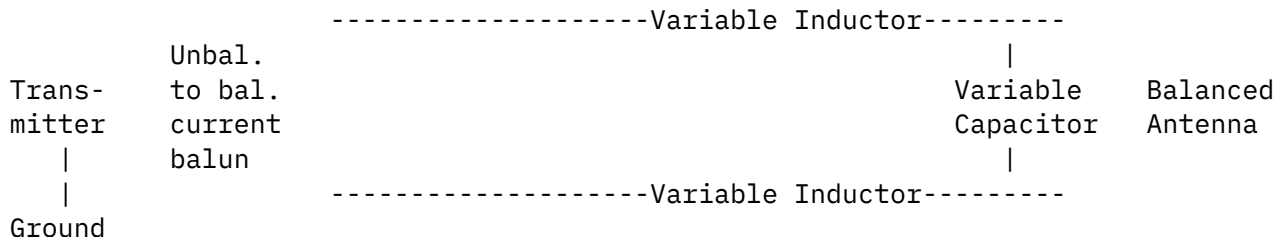
Date: Tue, 11 May 93 11:53:40 EDT
From: epacyna@auratek.com (Edward Pacyna)
Subject: G5RV Rips off QRPers

Now that I've got you attention, thought you folks might like to see a post I made to the Internet that has application to QRPing.

From uunet!auratek.UUCP!epacyna Tue May 11 11:44:53 1993
Path: auratek!epacyna
From: epacyna@auratek.UUCP (Edward Pacyna)
Newsgroups: rec.radio.amateur.misc
Subject: G5RV - A Rip Off
Message-ID: <1105@auratek.UUCP>
Date: 11 May 93 15:44:53 GMT
Organization: Aurora Technologies, Inc.; Cambridge, Mass.
Lines: 48

While this is a popular antenna, numerous untruths and false claims have been propagated regarding its operation. The G5RV has no magical attributes. Even the article in the ARRL Antenna Compendium has many falsehoods. The G5RV is a 3/2 wave antenna on 20M where it presents a reasonable match to a 50 ohm system. On all other bands there is considerable SWR, and an antenna tuner must be used. The 34' section of open line does not extend the antenna length on 80M, or function as a proper matching section to match a 50 ohm system on the other bands. Those who have low apparent SWR's are simply using a long run of lossy coax to mask the high SWR and wasting power. Not only should coax not be used, and never use a ferrite balun in high impedance circuit (very lossy).

For a limited space, 80 - 10M antenna, its more efficient to center feed the 102' horizontal with just ladder line all the way to the tuner. The tuner should be of the unbalanced to balanced type (i.e. Johnson Matchbox). Most of the commercial tuners are of the unbalanced type (L or T networks) and fake it by hanging a lossy balun on the high Z output. Also the balun should be configured to produce equal current (not voltage as most do). Alternatively, you can build a balanced tuner and put a current balun on the low Z side as shown below.



Note: Inductors are gang tuned. Balun is short length of coax with a lot of ferrite beads over outside, or a length of coiled coax.

But you say I use a G5RV (or worked many others that use them) and they seem to work. Sure they work, but with compromise. Here's an example. Every time you half power, your signal reduces by 3 dB. So reducing your power to one quarter reduces your signal by 6 dB (or 1 S unit). So the average 100W station with 75% of the power going into losses will only be 1 S unit weaker. For casual operation, who cares. If you're a QRP'er, contesteer or chase DX, that one S unit makes all the difference in the world. Why pay for and install things that reduce your signal or can damage your expensive equipment (what happens when a misused balun burns up)?

Walt Maxwell in his book Reflections published by the ARRL is a must reading. His treatment on SWR, Baluns and the G5RV is lucid.

73's

Ed W1AAZ

From qrp-request@Think.COM Thu May 13 11:01:36 1993
Date: Thu, 13 May 1993 08:01:48
From: hlester@as.arizona.edu (Howard Lester)
Subject: Grizzlies

++Lewis and Clark did almost 200 years ago. Country hasn't changed
++much in that time except not so many grizzlies around :-)!

>The grizzlies moved to Washington.

They moved to Washington from California....

From qrp-request@Think.COM Thu May 13 11:30:14 1993
Date: Thu, 13 May 93 10:30:07 CDT
From: dadams@cherry.cray.com (David Adams)
Subject: Re: Grizzlies

>>The grizzlies moved to Washington.

>They moved to Washington from California....

Can't blame them, can you?

--David C. Adams Statistician Cray Research Inc. dadams@cray.com

Old cowboys never die. They just smell that way!

From qrp-request@Think.COM Mon May 24 09:30:11 1993
Date: Mon, 24 May 1993 08:30:20 -0500 (CDT)
From: "Jeff M. Gold" <JMG@tntech.edu>
Subject: Help.. new ham

Howdi,

OK, I admitt that this isn't a QRP question, but I have faith that the people on this list either know or have access to all necessary ham knowledge.

I ran a novice ham class and one of the young teenagers really took up an interest in the hobby. He did real well on his CW and passed the test the first time.. he is now KE4AOS. His family is very supportive, but not real big on having money.

His dad got him a 8 band vertical and we just got it together and tuned up, and an old Yaesu FT102. The rig seems to work well except for the relays. The are frequently messing up and need to be taken out and cleaned.

Are there any reasonable sources of this part.. I guess there are 2 sets of relays in the rig.. I was thinking about getting him an early Christmas present.

thanks

73
Jeff,AC4HF

From qrp-request@Think.COM Mon May 10 09:23:33 1993
Date: 10 May 1993 08:23:23 -0500 (CDT)
From: "Jeff M. Gold" <JMG@tntech.edu>
Subject: Help: Ten Tec

All,

I just bought a Ten Tec 405 50? watt amp for the argonaut (I don't know why except to have when traveling to make skeds with homebase..I fell extremely guilty).

Anyway, does anyone have a schematic and directions. The guy I bought it from said it worked...when I hooked it up the

lights went on and both meters worked but the SWR went sky high and seemed to lock the TX relay..think it may be oscillating.

any idea what these go for.. the cabinet is pretty near mint.

thanks

Jeff, AC4HF

From qrp-request@Think.COM Fri May 28 09:31:34 1993
Date: Fri, 28 May 93 08:31:11 CDT
From: msdooley@rockdal.aud.alcatel.com (Michael S. Dooley)
Subject: here in Dallas

Chuck,

Yep, Actually I work in Richardson and live between Princeton and Lake Lavon out in the sticks. It's a long drive (about 27 miles), but definitely worth it. Are there going to be any neat QRP goings on at HamCOM I should attend?

Mike Dooley KE4PC

From qrp-request@Think.COM Fri May 28 19:32:11 1993
Date: Fri, 28 May 93 16:30:35 PDT
From: dh@deneb.csustan.edu (Doug Hendricks)
Subject: HootOwl Sprint

I was looking through my back issues of QQ and discovered that there is a contest contest this weekend. It is the Hootowl Sprint which runs from 8 to Midnight local time Sunday night. Does anyone know what the exchange

From qrp-request@Think.COM Mon May 10 11:28:00 1993
Date: Mon, 10 May 93 10:27:47 -0500
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: houston

hope nobody was looking for me yesterday. i was in tornados from dallas to houston. saw about a meter (3 feet) of rain on the way. qrn at 40 over. quite a display of electrical activity in the earth's atmosphere.

hotel room second floor overlooking parking lot. about 80 ft to fence. long wire goes up tonite. :-)

72 de k5fo/5 dit dit

Chuck Adams, K5FO @ 70+ wpm cw
adams@sgi.com

From qrp-request@Think.COM Mon May 17 12:11:39 1993
Date: Mon, 17 May 93 11:11:21 -0500
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: houston

gang,

sorry i didn't get to work anybody in the group. i worked some each night on 20. all 4's in FL, GA, VA, ... all reports 339 449. my 2 watts on 60' long wire didn't do too well.

didn't get on 30 meters at all. tuner had trouble with one variable. gotta take it apart this week and check it out. think one plate has burr at point i needed to resonate long wire.

friday, coming back from houston to dallas. 10 meters, ssb. worked argentina and venezuela with 10 watts, uniden hr2510 on low power. worked a wb6 in phoenix cross mode, he was on cw and i was on ssb!! nice qso. blew his mind and i never got why he was calling cq in the low end of the phone band..... band was dead most of the time to usa, but i was monitoring. south america was going most of the 4 hr trip.

72 de k5fo/5/qrp dit dit

Chuck Adams, K5FO @ 70+ wpm cw
adams@sgi.com

From qrp-request@Think.COM Tue May 11 17:09:36 1993
Date: Tue, 11 May 1993 17:09:25 -0400
From: Scott Cranston <cranston@zk3.dec.com>
Subject: How are Howes ?

Haven't seen any comments on the Howes kits available from Townsend Electronics. Does anybody have one of these, or can anyone otherwise comment on if they any good, prices, info, etc on them.

Thanks
Scott, KB1NW

From qrp-request@Think.COM Mon May 10 10:23:09 1993
From: jpo@acd4.acd.com (Jim Osburn)
Subject: HW-8 VFO
Date: Mon, 10 May 93 8:25:24 EST

>
> Has anyone ever noticed how accurate the tuning dial on an HW-8 is? When
> compared to a calibrated
> receiver, the HW-8 is +/- 5KHZ. Is this about right from your observations?
>
>
> Bob Ross WA2MFI
> rar3h@virginia.edu
>

My HW-8 isn't that good.
I was on 40 M last night and it was reading 10 kHz low.

I bought my HW-8 used at a hamfest last year.
I have considered doing the calibration in the manual, but I'm not sure
it will help.
I can measure the crystal oscillator frequencies and the VFO frequency
by listening to them with my Kenwood rig.
The VFO frequency is close to where it should be; it's the crystal
oscillators that are wrong.
Looking at the schematic, I can only see adjustments for peaking the
crystal oscillators; I don't see any for pulling them on frequency.

Could the problem be that the rig is old enough that the crystals have
aged and shifted frequency?

I can make one band right.
But, I don't know of a good solution short of buying new crystals to make
all the bands right.
I'm not going to buy new crystals.
I might build a crystal calibrator.
Does someone know a better solution?

I can live with the problem, it's not a biggy.

Jim, WD9EYB

From qrp-request@Think.COM Mon May 10 11:59:16 1993
Subject: Re: HW-8 VFO
Date: Mon, 10 May 93 11:52:32 -0400
From: halbert@crl.dec.com

I have made my HW-8 more stable by removing the mica trimmer on the tuning cap and replacing it with a small air variable trimmer. The trimmer action is stiff, and it cannot be jarred by vibration. The original trimmer seemed sensitive to both temperature and mechanical shock.

I originally had tried a ceramic NP0 trimmer, but that was not stable enough mechanically. I have also dripped wax into the VFO coil to immobilize the slug, but I'm not sure that was necessary.

Dan, KB1RT

From qrp-request@Think.COM Tue May 25 13:55:03 1993
Date: Tue, 25 May 1993 11:53:24 EDT
From: "Fred Cady ieefc@msu.oscs.montana.edu" <fred_c@ece.ee.montana.edu>
Subject: HW-9 and Float Trip

Well, it looks like I got the HW-9 working. Changed the injection levels for the mixers (2nd mixer still looks suspicious to me) and put in MRF-476 (I think) finals and turned up a new output transformer (10 bifilar turns on FT-37-61 core). Now getting 8 watts out on 80 and 40, 4 watts on 20 and 1 watt on 15. (I know, but I can always turn it down to 5 watts!) First QSO was with DL8UUU on 20m, first call! So it looks like the HW-9 is go for the Missouri River float.

We will be on the river Saturday 29 May to Friday 4 June. I will try the following schedules (time is UTC):

0200 14.055 - 14.060 (that's as close as I am going to get
with the HW-9 dial!)

0230 7.035 - 7.040

0300 3.555 - 3.560

Hope I can hear some of you guys out there. Should be fun.

I have heard there is a book of mods especially for the HW-9. Can anybody give me any information?

73, Fred KE7X

From qrp-request@Think.COM Wed May 26 12:03:10 1993
Date: Wed, 26 May 93 09:01:33 PDT
From: dh@deneb.csustan.edu (Doug Hendricks)
Subject: HW-9 Price

Guys, I bought a mint condition HW-9 with WARC Package and matching HW-9 power supply last night for \$200. Did I pay too much? I now have a complete set of the Heath QRP ri. Let me know if I paid too much or if I got a "deal". Also, Bill Kelsey sent me instructions to align and tweak my NN1G 20 meter transceiver. If anyone else needs the info, let me know. 72, doug KI6DS

From qrp-request@Think.COM Mon May 10 11:20:20 1993
From: hpb@hpb.cis.pitt.edu (Harry Bloomberg)
Subject: HW-9 with G5RV
Date: Mon, 10 May 93 11:20:13 EDT

Our campus radio club installed a G5RV antenna Saturday. It works just fine with our IC-781. However, it's a different story with my HW-9.

Without use of an antenna tuner, the HW-9 receiver is overwhelmed by what can only be described as "horrendous crud". I hear what sounds like lots of Broadcast and SW stations. However, when I route the signal to the HW-9 through an antenna tuner, all this noise goes away, and the receiver works just fine.

I have a theory as to what's happing, but I'm hardly an rf expert and I'd like some other opinions. Since the G5RV is a broadbanded antenna, I suspect that lots of strong out-of-band signals are being provided to the front end of the HW-9, and the HW-9 is unable to reject these. When I use an antenna tuner, the tuner filters out these out-of-band signals, and things work OK.

Does this theory hold water? Does this also explain why the HW-9 works fine with single-band antennas like dipoles?

Harry Bloomberg WA3TBL
hpb+@pitt.edu

From qrp-request@Think.COM Mon May 10 12:43:47 1993
Date: Mon, 10 May 93 12:11:09 EDT
From: epacyna@auratek.com (Edward Pacyna)
Subject: Re: HW-9 with G5RV

The antenna signal path in the HW9 receive section is through a low pass filter, a T/R switch, doublely tuned band pass filters and to the first mixer, a SBL-1. There is no RF amplification. The SBL-1 is a very strong mixer and with the band pass filter there should be no problems as you describe.

The G5RV NEEDS an antenna tuner!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

It presents all kind of weird impedances except on 20M (where its a 3/2 wave antenna and near 50 ohms). Its a very high SWR antenna on other bands and the only reason some guys think an antenna tuner is not necessary is because they use coax, which hides the SWR through losses. The G5RV has no magical properties as so many think and COAX SHOULD NOT BE USED. Just use open ladder line and a tuner (a balanced tuner is best). Any one who thinks different should read the chapter on multiband antennas in Reflections by Walt Maxwell for a lucid analysis of this antenna.

Doublely tuned band pass filters need to be terminated on both ends for proper operation. This may well be your problem since without the tuner the G5RV id presenting a improper load to your front end.

73's

Ed W1AAZ

From qrp-request@Think.COM Mon May 10 12:45:01 1993
Date: Mon, 10 May 93 12:11:09 EDT
From: epacyna@auratek.com (Edward Pacyna)
Subject: Re: HW-9 with G5RV

The antenna signal path in the HW9 receive section is through a low pass filter, a T/R switch, doublely tuned band pass filters and to the first mixer, a SBL-1. There is no RF amplification. The SBL-1 is a very strong mixer and with the band pass filter there should be no problems as you describe.

The G5RV NEEDS an antenna tuner!!

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Doublely tuned band pass filters need to be terminated on both ends for proper operation. This may well be your problem since without the tuner the G5RV id presenting a improper load to your front end.

73's

Ed W1AAZ

From qrp-request@Think.COM Mon May 10 15:36:01 1993
Date: Mon, 10 May 93 15:34:09 EDT
From: kfeeney@helios.TN.CORNELL.EDU (Kevin Feeney)
Subject: hw8 tuning accuracy

In the HW-8 mod book, and at least one other place, I've seen references to the tuning inaccuracy on the HW-8 being due not so much to the VF0, but to the variations on mixing oscillator. I don't have the schematic in front of me but the basic problem is that the crystals for the various bands are diode switched and as the voltage across the back biased diodes for the 'off' bands varies, so does their capacitance - moving the frequency of the crystal currently in use.

The fix is to replace some 100 K resistors with 470 resistors and zener diodes to stabilize the voltages, and then realign and things are supposed to stay closer to home. I've got the parts but haven't tried it yet.

Also I have seen reference to replacing C5, the offset cap with a piston trimmer to stabilize the TX offset. Likewise I scrounged the part but...

Now, does anybody have a good idea for squeezing the air out of that huge HW-8 case (7/8's the size of my SSB/CW 50 watt argosy) and making it into a slim little package that will fit nicely in a backpack? Metal work is not my forte...

72 de Kevin, WB2EMS

From qrp-request@Think.COM Wed May 12 18:00:45 1993
Date: Wed, 12 May 1993 15:59:37 EDT
From: "Fred Cady ieeefc@msu.oscs.montana.edu" <fred_c@ece.ee.montana.edu>
Subject: HW9

Hooray, hooray, I found a HW9. Finals are smoked plus what else I don't know. Neither does it have the WARC band mods. In a couple of weeks I am going on a 180 mile canoe trip on the Mighty Missouri here in Montana and I would like to have the WARC bands on it. Can anybody put me in touch with someone who might have one? ASAP?

Also, I saw Pete Hoover's qrp portable rig at Visalia. Neat job and he had a flexible solar panel. Pete, are you a member of this august group? I would like to find out what Pete is using and what the source of supply for that panel would be. I think it was an amorphous type with about 1-2 amp capacity.

Will get my act together if I get the HW9 running and put up a sked

for the canoe trip. It should be fun...camping in the same spots
Lewis and Clark did almost 200 years ago. Country hasn't changed
much in that time except not so many grizzlies around :-)!

73, Fred KE7X

From qrp-request@Think.COM Wed May 12 19:18:21 1993
Date: Wed, 12 May 93 16:18:15 PDT
From: paulb@harley.tti.com (Paul Blumstein)
Subject: Re: HW9

Fred Cady KE7X sends:

+

+Will get my act together if I get the HW9 running and put up a sked
+for the canoe trip. It should be fun...camping in the same spots
+Lewis and Clark did almost 200 years ago. Country hasn't changed
+much in that time except not so many grizzlies around :-)!

The grizzlies moved to Washington.

From qrp-request@Think.COM Wed May 12 19:47:15 1993
From: Kevin Purcell (Rho) <a-kevinp@microsoft.com>
Date: Wed, 12 May 93 16:45:59 PDT
Subject: RE: HW9

(Bruce: this is one of those messages that a reply on MSMAIL would send
to qrp-request -- if you want to check the header).

How much did you pay for the dead HW-9? -- I'm trying to get a handle
on the cost of dead rigs.

Would the WARC kit be easy to put together yourself -- homebuilt
inductors and crystal from JAN or International Xtal?

BTW, I'm looking for a HW-8 to "WARCify" (convert to 160, 30, 17 and
12). If anyone has any leads (dead or alive) please let me know.

Kevin Purcell N7WIM / G8UDP
a-kevinp@microsoft.com
"We conjure the spirits of the computer with our spells"

From qrp-request@Think.COM Mon May 10 13:18:03 1993
Date: Mon, 10 May 93 13:53:53 GMT
From: jkearman@arrl.org (Jim Kearman)
Subject: Indoor Antennas

Some readers of this group have asked for more info on indoor antennas. Let me start by saying that using indoor antennas with QRP is somewhat aggravating! But, if you must, you must.

I recently wrote a book for ARRL called "Low Profile Amateur Radio." It deals with just this subject, plus mobile and portable operation. I wouldn't characterize it as a QRP book. The time comes when you have to run more than 5 watts to complete a QSO, and it may be important that you complete it. I tried to sell the idea of not being the loudest signal in six counties, without preaching exclusive QRP.

Anyway, in this book are a sampling of antennas you can build for use in an apartment, condo or dormitory. Some were written up by Rod Newkirk, W9BRD. You OTs may know that Rod made a career of operating low profile (and low cost: most of his rigs were built in coffee cans and the like), while shepherding the "How's DX?" column in QST. N2KW wrote up a rigid monoband loop he built. I also picked up a windowsill vertical described by Lew McCoy, back in the Dark Ages.

I personally use wire loops. My building is brick over wood, so indoor antennas work okay. Outside is always better, as it gets you away from power-line noise, and from radiating into the phones, TVs and whatever (they listen to the stereo downstairs when I say so).

I use the biggest loop I can support in the room, with a tuner in the center. If the loop is less than 1/2 wavelength I open it at the side opposite the tuner (toggle switch is okay).

When I lived in an apartment in Manhattan, I used a 20-meter folded dipole (third floor). I got a Johnson KW matchbox before the price increase in 74, and used that to tune it. Later, I loaded up the fire escape. I worked VK and ZL on 40 CW with a Viking Valiant--maybe 200 watts out.

I was also into traffic handling in those days, which meant 80/75 meters. In an effort to be heard on Long Island, I tried running a KW on 75 meters. I had a counterpoise running through the apartment. The far end was in the bath room. One day, I heard my wife screaming--the counterpoise was displaying a corona ball as I spoke!

If the building has steel beams, reinforced concrete walls/floors, or aluminum siding, inside antennas won't do much for you.

For more secrets, read the book! :-}

72,

Jim, KR1S

--

You know you're getting old when the new rig you had as a Novice becomes a collector's item.

jkearman@arrl.org WN2EDW 1962 - KR1S 1993

From qrp-request@Think.COM Tue May 18 18:31:23 1993

From: J. Sherwood Williams <jwill@cabell.vcu.edu>

Subject: Kanga Super Tee Antenna Tuner

Date: Tue, 18 May 93 18:31:18 EDT

Has anyone out there built the Kanga Kit Super Tee Antenna Tuner?

Note this is the same tuner that was detailed in the June 1992 QRP Quarterly.

I have a few questions relating to it before I dive into building.

1.) Can I get by with only five switchable inductors? I have a nifty bar of five push-on-push-off switches I would like to use and wonder which inductors are almost always either switched in or switched out (and thus could be omitted or permanently put in-line)

2.) In your opinion, how does the tuner function. Are you pleased with it?

3.) How are the last two inductors constructed? Are they Air-wound? The instructions aren't really clear on the construction of the 0.25 and 0.12 MicroHenry inductors. I need a little clarification as to their construction.

Thanks in advance for any replies.

Robert S. Williams

From qrp-request@Think.COM Tue May 25 11:49:27 1993

Date: Tue, 25 May 1993 08:49:15

From: hlester@as.arizona.edu (Howard Lester)
Subject: keeping the tradition alive

I have a new Vibroplex Brass Racer iambic paddle to replace the Bencher I had borrowed for several months. The Vibroplex is wonderful, and, as David Letterman would say, "easy on the eyes". It is a heavy brushed brass piece on a triangular rosewood base. Simply made, its tension on each paddle is adjusted with sliding magnets - no springs. The price is similar to a Bencher: \$65.

You have just read an unsolicited testimonial from:

Howard KE7QJ

From qrp-request@Think.COM Tue May 25 14:18:05 1993
Date: Tue, 25 May 93 17:55:06 GMT
From: jkearman@arrl.org (Jim Kearman)
Subject: Re: keeping the tradition alive

hlester@as.arizona.edu (Howard Lester) writes:

>I have a new Vibroplex Brass Racer iambic paddle to replace the Bencher I had
>borrowed for several months. The Vibroplex is wonderful, and, as David
>Letterman would say, "easy on the eyes". It is a heavy brushed brass piece
>on a triangular rosewood base. Simply made, its tension on each paddle is
>adjusted with sliding magnets - no springs. The price is similar to a
>Bencher: \$65.

>

>You have just read an unsolicited testimonial from:

>

>Howard KE7QJ

>

>

I'll have to get one of those paddles. I used to collect "bugs," when they were sensibly priced. Now, they're too rich for my blood! I've started buying iambic paddles. I have a Hal "FY0," but would like to have an original FY0 iambic, if I could find one. Also have a Polish copy of the Bencher (really!), and a Bencher (what I used to transition from bug to iambic keyer). A couple of years ago I went temporarily insane and bought a "Mercury" paddle by N2DAN. It also uses magnets, mounted on screws with locking nuts. It's HEAVY and beautiful. You may have seen photos of it in _CQ_ magazine. It also cost me more than all my other keys put together.

Personally, the Brown Bros paddles and their clones never did

much for me. I actually gave away a clone, because it was so sticky. I don't like the wobbly handles on the Bencher; it also tends to disintegrate in your luggage. When I go off shore now, I take my computer, but a backup paddle won't hurt. The Mercury weighs a ton and I'd hate to damage it, so the Bencher still goes on trips as a backup.

I think a paddle I built from two Microswitches is going to appear in Hints & Kinks, in July _QST_. I'm working on another one now, using the contacts of an old relay. I'm going to use "hard" Fender guitar picks for the handles.

72/73,

Unabashed CW Fan, often found on 40 meters after dark, EDT.
Jim, KR1S

--

Looking for historical information on the GRC-109 radio set.

jkearman@arrl.org

From qrp-request@Think.COM Mon May 17 00:39:59 1993
Date: Sun, 16 May 93 21:38:41 PDT
From: dh@altair.csustan.edu (Doug Hendricks)
Subject: Lectrokit Spider Review

Jim, WA6GER is a good friend of mine. He sent me the following review which I thought the group might be interested in.

Product Review
Lectrokit SP1 Spider
by
Jim Cates, WA6GER

The January '93 issue of 73 has a cover-feature construction article by Mike Agsten, WA8TXT. It is a QRP transceiver, crystal control on BOTH transmit and receive. it is called the "Spider". It can be set up for 80, 40, or 30 meters.

I read the article, mainly because I read everything related to QRP. But my interest was not aroused, remembering all the frustration of my crystal-controlled novice days.

Here the matter remained, until Forest, N6ZBZ put one of these Spiders on 40, and asked me to listen for him, portable in Phoenix. He was Q5 copy, even though his antenna was a dipole only ten feet off the ground. Good, solid, QSO.

This grabbed my attention like a..... well, spider bite. Monkey see; monkey do. So naturally I had to have one. On 40, of course, my favorite band. I dug out the issue of 73; checked the old junk box; got out some catalogs to price a couple of needed parts. Gazooks! These minimum order restrictions! Forget it! And I'm not one for kits; too many irritating experiences.

But hark! A footnote, Lectrokit has the board and all surface mounted parts for ... for only twenty nine dollars? Hey, for twenty nine bucks, I'm starting to like kits.

This one arrived quickly, like return mail? So, let's snip open this padded envelope and find out what is inside.

To begin with, the instructions are so complete as to make assembly 99% foolproof. Definitely a beginner's project. (Blushingly I confess I am the reason why the kit is not 100% foolproof. I managed to install Q6 upside down on the board; not easy with the overlay - clearly marked - right in front of me.)

The instructions and the parts are in separate plastic envelopes. And when I say instructions, I mean with CAPITAL LETTERS. Like sixteen pages; everything from how to read resistor and capacitor values to a drilling template. Pictorial diagrams, schematic; it's all there. Simply too much to permit a detailed description; so, let the table of contents suggest the extent:

1. Fundamentals of component installation
2. PC Board Assembly
3. Band Selection
4. Top panel assembly and wiring
5. Tune-up and operation
6. In case of difficulty
7. Schematic diagram
8. Mechanical drawings
9. Pictorial wiring diagram
10. PC parts overlay

In addition to all the above, step by step, check-off assembly instructions, making this the most failure-proof kit since Heath.

Is the kit complete? Bet your sweet patootie it is. How about solder included, and even an abrasive pad to scour the circuit board to remove the fingerprints you put on it while turning and eyeballing. All parts are there. None of this typical product review stuff, "I phoned XYZ company and they sent the missing parts....etc." This kit is complete; I mean no missing parts. and, they are supplied in bags, permitting bitesized assembly chunks, letting you follow a logical-sequence assembly.

Ok, so now it is all assembled. How easy is it to tune up? Apple pie. Peak one transformer for RF out, one for maximum received signal strength (loudness). That's it. Period.

How well does this rig work? Is it practical? Yes, oh yes, yes, yes. In a month of casual operating, around 0800-0900 Pacific time, on my two crystal frequencies, 7120 & 7125, I have worked and

confirmed seven states, and snag a qso almost every day.

At night there are the usual foreign broadcast problems, same as you hear from your megabuck rig. But I've worked east to the Great Lakes, on an average night.

Is one watt enough? Believe me, 559 to 599 reports are common. Do you need a cw filter? After all, the receiver bandpass is admittedly a tad broad. Hey, this is a simple rig. Naw, the best filter is the one between your ears. Learn to use it!

I now have three Lectrokit Spiders. And they have put fun back into hamming. I love the challenge, one watt, crystal control, forty meter QRM and QRN. But honestly, it isn't that big a deal; no fish in a barrel, but entirely practical. And, if 40 isn't your cup of tea, put yours on 80 or 30. You'll love it, and that's a promise.

*Lectrokit, 401 W. Bogard Rd., Sandusky, OH 44870

SP1-BBM: Bare PC board with manual	\$12 postpaid
SP1-PC: PC board, manual, all PC board parts....	\$29
SP1-Kit: Complete kit, including case.....	\$39
SP1-AT: Assembled Spider, 80, 40, or 30.....	\$59
AF-1: Audio bandpass filter kit.....	\$6
Shipping (Except SP1-BBM).....	\$4
Ohio residents add 6% tax	

The usual disclaimers apply. Neither Jim nor I have any financial interest in nor are we connected in any way with Lectrokit. 72.....Doug, KI6DS

From qrp-request@Think.COM Fri May 28 09:09:38 1993
From: mvjff@mvubr.att.com
Date: Fri, 28 May 93 09:08 EDT
Subject: May Daze Sprint

Gang,
I had fun with the Colorburst Sprint last night (5/28)

Surprised to work N8ET, Bill from OH,
Also N01E, NG1G, WA1JXR, W1CFI, KN1H, VE2DRB.
W2JEK and KR1S were heard loudly.

Some stations heard were outside of my VXO range.

I used a low, enfed wire about 100' long
with 1.2 watts out. My signal reports
were not that good.

Based on last nights results I should:

1. Select a crystal that will tune a bit higher in freq.
2. Increase the VX0 cap to 100 pf. for more freq. spread.
3. Find a footswitch to control antenna change over.
4. Fix the HW-9 very sloppy, sticky, tuning (rcvr) dial.
5. Install a loop antenna for lower noise, more gain, and a horizontally polarized radiation pattern, for close contacts.

72, Jim - W1FMR

mvjif@mvubr.att.com

From qrp-request@Think.COM Mon May 10 09:26:49 1993
Date: 10 May 1993 08:26:48 -0500 (CDT)
From: "Jeff M. Gold" <JMG@tntech.edu>
Subject: MFJ Signal Enhancer

All,

I also picked up a MFJ 7521B Signal Enhancer II at a ham fest Sat.

The device seems to work GREAT.. have no idea what it really is.. but the local guru was standing next to me and hinted that I really needed to buy it.. far be it from me to argue.. offered what I had left in my pocket and got it.

Well hooked it to my HW9 and turned to 80 meters in the afternoon.. The band sounded like there was thunderstorms inside my radio. I played with both set of filters and the HW9s narrow filter and got rid of EVERY BIT of NOISE and the signal sounded great and at its original strength.

Anyone have a direction manual.. I was using it on peak function.. but it has a highpass and low pass and notch..

sure would like to know how to really use it.

thanks

Jeff,AC4HF

From qrp-request@Think.COM Thu May 13 14:21:28 1993
Date: Thu, 13 May 93 14:16:09 EDT
From: Frank.Milos@East.Sun.COM (Frank Milos - Sun USOPS CSU Manufacturing

Engineering)
Subject: MFJ SIGNAL ENHANCER

Last week someone in the group was looking for the manual for the MFJ SIGNAL ENHANCER MODEL MFJ-752C. I have a copy of the manual if that person still needs it.

Just drop me e-mail and let me know...

72

Frank - N01E

From qrp-request@Think.COM Mon May 24 22:27:16 1993
From: J. Sherwood Williams <jwill@cabell.vcu.edu>
Subject: Mizuho HF HT Rigs
Date: Mon, 24 May 93 22:27:10 EDT

24-May-93 00:05:37

Sb: Tokyo High Power HT

Fm: William Ruppert WB9BQG 70730.2503@compuserve.com

To: John Kepner, WD6DFG 75266.760@compuserve.com

Hi John,

Yes we were talking about the Tokyo HY Power radio as well as the Mizuho

line of HF HTs. I own both radios, and in fact at present have a collection

of about 25 Mizuho radios. The Tokyo Hy Power rig (HT-750) is a Tri bander

covering 40,15 and 6 meters with about 3 watts out on 40 ,15 and 2 watts on

6 meters. The HT750 is a synth PLL radio and covers the entire 40 and 15

meter bands; while the Mizuho Mono bander is a VXO rig with a 25 KC spread

for each crystal installed. On the 20 meter and above units the VXO spread

is 50 Kc per Xtal.

Each radio holds two crystals at a time and it just takes a few minutes to

change them. The HT-750 has a built in side tone and CW filter and the

Mizuho

does not, But the Mizuho is a much smaller rig.

All in all they are very different radios but I would have to rate the

Mizuho a higher grade in the Rcvr department. The Tokyo Hy-Power radio is a

PLL rig and there is noise from that as well as a overload problem on strong

signals. The HT-750 has a lot of great features like a digital display, but

the Mizuho radios are tried and true, beautifully designed, radios. Both

radios are great and I am sure you would love either of them. I have checked

in to mid-cars on 40 meters often with both radios and have a friend that

works 40 meters from his bicycles all the time.

Just remember the better the antenna the better the QRP radio will have a

chance of being heard. I have uploaded a spec sheet on the Mizuho radios in

the Equipment/Antennas section. As far as range goes you can talk hundreds

of miles with a G5RV on 40 meters and around the world on the higher bands.

Good luck and let me know what you do.

73 Bill WB9BQG

So: there I his E-Mail address from his most recent posting on Compuserve. He has arranged the manufacture of leather cases for the Mizuho/AEA/Jcom HF HTs and is taking orders for \$20.00 each.... Not a bad deal for a handmade leather case.

Regards,

Robert S. Williams

From qrp-request@Think.COM Wed May 26 12:02:12 1993
Date: Wed, 26 May 93 15:56:34 GMT
From: PENC@psu.edu
Subject: more dope...

Agree with J. Kearman's last mail message. As a kid when I used to build lots of electronic devices, used duco cement as a replacement since it was readily available whereas q-dope was available only downtown at local radio/electronics outlets. It can be used. Also have no experience with nail polish altho other homebrewers i know use it and say there's no problem.

The duco cement did not present any problems in my experiences.

As one who shys away from "ugly construction" I'd prefer the q-dope approach. Never used q-dope. Anyone out there who can comment on the ease of application of q-dope vs duco cement?? I'd guess they're both messy...

de WK2A

From qrp-request@Think.COM Wed May 26 15:39:49 1993
From: Kevin Purcell (Rho) <a-kevinp@microsoft.com>
Date: Wed, 26 May 93 12:38:28 PDT
Subject: RE: more dope...

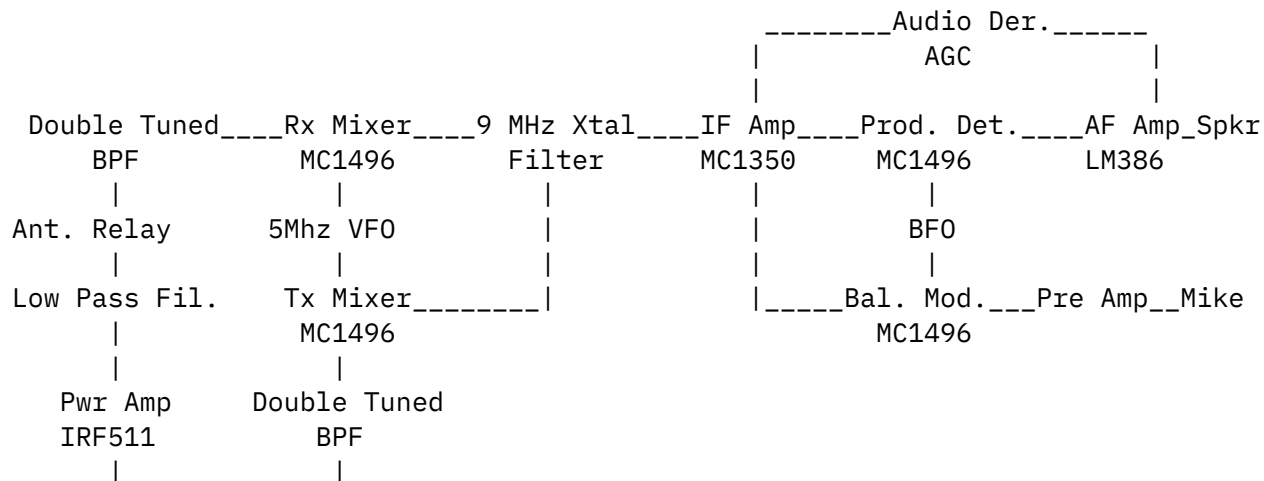
You could make your own from old polystyrene packaging and a solvent (toluene would probably be best, but I think that has recently become a Class II carcinogen. Not to sure about the carcinogenic properties of xylene, but its toluene + another methyl group). They also make modern versions of naplam this way (dissolved polystyrene as a gelling agent + gasoline).

Whatever you do do it in the open air. If I had one I'd use a fume hood.

Kevin Purcell N7WIM / G8UDP (who used to be a chemist before he was a programmer)
a-kevinp@microsoft.com
"We conjure the spirits of the computer with our spells"

From qrp-request@Think.COM Mon May 10 12:44:40 1993
Date: Mon, 10 May 93 11:41:15 EDT
From: epacyna@auratek.com (Edward Pacyna)
Subject: More Info on Homebrew 20M SSB Transceiver

Here is a quick round down on my homebrew 20M SSB transceiver.



Driver-----Pre Amp
MOS Fet MRF 211

Hopefully the above is worth a thousand words. As you can see the receiver is just (4) IC's. The Xtal filter is a commercial unit (6 pole 2.4KHz BW). T/R control is PPT. The entire transceiver (except Tx power amp) is on a PCB about 6" x 5". Never got around to putting it all in a box (yes my QSO's were made with just the PCB's on the bench). When I get around to it I've got a TenTec TG28 (8"w x 6"d x 2"h) set aside. The power amp is on a 2" x 4" PCB and will go on the outside back panel w/ a heat sink. The transmitter is (3) IC's plus (3) MOS Fet amps. The VFO is (2) FET's and the BFO (1) FET. Tuning range is currently 14.15 - 14.35MHz with a 6:1 reduction drive.

Although I've worked a fair number of stations (including Europe) with the 1 watt output, I am considering another power amp circuit at 5W. The driver is capable of up to 300Mw output (and can be reduced by turning down the gate bias pot.).

Be happy to answer any specific questions.

73's Ed

From qrp-request@Think.COM Mon May 17 12:38:11 1993
Date: Mon, 17 May 93 11:05:06 EDT
From: epacyna@auratek.com (Edward Pacyna)
Subject: More on G5RV

Since I referenced QRP, also sending the attached to this list too. They may be more of us than you think.

73's

Ed W1AAZ

(Subject: Don't get ripped off by the G5RV
Newsgroups: rec.radio.amateur.misc

The G5RV is only an antenna on 20M. On this band its a 3/2 wavelength antenna and the SWR is 2.8:1. If you look in transmission line chapter of the ARRL handbook, you will find a table showing the loss per 100' of popular coax feedlines. The loss is specified for matched 50 ohm systems. So you'll also need to look at the graph that shows the incremental loss due to SWR that must be added. Note: SWR's only up to 20:1 are shown. Because its a 3/2 wave length the G5RV has a little bit of gain on 20M which is offset by the transmission

line loss. So the G5RV on 20M works no better than a more compact 20M dipole.

The G5RV is not a multiband antenna. Using MININEC, I modeled this antenna and the SWR is much too high to be using coax feed. The SWR varied between 50:1 to 100:1 on all the other bands! The transmission line loss now becomes significant. The G5RV is now part antenna and part dummy load. Your 100W station is now QRP. With a 6dB loss, only 6.25W will reach the antenna; and a 9 dB loss will only get 3W (97% loss) to the antenna.

Also, under high SWR conditions, the voltages on the line become quite high. Running high power on this antenna will exceed the voltage rating of most popular coax.

73's

Ed W1AAZ

From qrp-request@Think.COM Tue May 25 15:29:22 1993
Date: Tue, 25 May 1993 12:29:23
From: hlester@as.arizona.edu (Howard Lester)
Subject: more on the Vibroplex

A couple of things jkearman's post reminded me of:

- 1) This Brass Racer is also available with a built-in keyer. That model # is, I believe, EK-1.
- 2) The paddles seem to be closer together than those of the Bencher. Some may or may not like that.
- 3) In the 80's QST reviewed it, and it seemed as if the reviewers didn't exactly rave about it, saying that "...once you get used to the feel of the magnets, it's pretty good..." or something like that. I think it's a lot better than just that.
- 4) You can set the paddle contacts so close that the paddle becomes virtually silent - i.e. no clicks. However, that's a bit TOO close!
- 5) I bought mine from Radio Works (them "current-balun" folks in VahGINya), and it took a week. They have a clever method of packaging their products: in a plain brown shopping bag. I wanted to buy directly from Vibroplex in Maine, but they were out of stock - the bases had been backordered.

Howard KE7QJ, who loves to hear those little peeps from around the world

From parish@Think.COM Tue May 25 16:17:07 1993
From: Edward Parish <parish@Think.COM>
Date: Tue, 25 May 93 16:17:06 EDT
Subject: more on the Vibroplex

Date: Tue, 25 May 1993 12:29:23
From: hlester@as.arizona.edu (Howard Lester)

A couple of things jkearman's post reminded me of:

- 1) This Brass Racer is also available with a built-in keyer. That model # is, I believe, EK-1.

I bought one at Dayton many years ago. Overall, it was a nice compact design. A couple of problems have cropped up. The brass finish has oxidized over the years, making the keyer a bit not so "easy on the eyes". The keyer also does not have an on/off switch, so if an empty beer bottle ends up resting on your keyer, you may end up with a dead battery. It also lacks a closed key switch. Both switches can be added with a bit of clever woodworking.

- 2) The paddles seem to be closer together than those of the Bencher. Some may or may not like that.
- 3) In the 80's QST reviewed it, and it seemed as if the reviewers didn't exactly rave about it, saying that "...once you get used to the feel of the magnets, it's pretty good..." or something like that. I think it's a lot better than just that.
- 4) You can set the paddle contacts so close that the paddle becomes virtually silent - i.e. no clicks. However, that's a bit TOO close!

It takes some adjusting and getting used to!

- 5) I bought mine from Radio Works (them "current-balun" folks in VahGINya), and it took a week. They have a clever method of packaging their products: in a plain brown shopping bag. I wanted to buy directly from Vibroplex in Maine, but they were out of stock - the bases had been backordered.

Howard KE7QJ, who loves to hear those little peeps from around the world

From qrp-request@Think.COM Fri May 28 09:17:09 1993

Date: Fri, 28 May 93 08:13:42 -0500
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: N9VV

gang,

don't be mislead by Ken's statement. he can do more than 50 wpm.

i know because i work he aperiodically. buy he's off doing that
digital stuff at REAL high speeds..... what is the baud rate for
tv?

72 de k5fo dit dit

Chuck Adams, K5FO @ 70+ wpm cw
adams@sgi.com

From qrp-request@Think.COM Fri May 28 08:14:00 1993
From: Bill Kelsey <kelsey@csn.org>
Subject: NE Test last night from Ohio....
Date: Fri, 28 May 1993 06:13:54 -0600 (MDT)

I finally remembered to turn the rig on for the Thursday nite hour long NE
QRP club activity last night.... Between the Ohio Static Crashes I even
managed to work a few!
VE2DRB was the most consistant - in there for the whole hour just above 3.579.
W1FMR was the weakest signal I worked - But I still want a copy of the
schematic Jim! QSL and SASE is on the way this AM.

I worked everyone I heard - except KR1S.... heard and called twice.... but
no luck.

Even managed to get WA1JXR right at the end after chasing him the last few
minutes.

Rig was my TR-7 cranked back to about 2W to a G5RV at 30' over water.

See you all in the next one!

73/72 - Bill - N8ET

From qrp-request@Think.COM Sun May 16 15:14:50 1993
Date: Sun, 16 May 93 12:13:29 PDT

From: dh@altair.csustan.edu (Doug Hendricks)
Subject: Need help finding chips

I am looking for a source for 2 chips, preferably cheap. The chips that I am looking for are the 74C926 and the MM5369AA. If you know of a source, please let me know.....I am building the simple frequency counter in the 93 handbook.....72, Doug

From qrp-request@Think.COM Mon May 17 21:42:59 1993
Date: Mon, 17 May 93 18:41:42 PDT
From: dh@altair.csustan.edu (Doug Hendricks)
Subject: Need Help With NN1G 20m XCVR

Ok guys, I need your help. I have built the 20 meter transceiver that Dave Benson published in the January QRP Quarterly. This article typifies most of what I have found in construction articles, the author assumes that his readers know something that they don't. He does not explain how to peak the rig. Would one of you help me out? When I turn the rig on, I have noise in the headphones, but no signals can be copied. Help! How do I put this rig on frequency, and how do I peak the receiver and transmitter?

From qrp-request@Think.COM Wed May 12 19:37:30 1993
Date: Wed, 12 May 93 16:36:12 PDT
From: dh@deneb.csustan.edu (Doug Hendricks)
Subject: Need Jan 88 issue QQ

Jim, W1FMR was kind enough to send me 2 of the 3 back issues that I need to make my set of large issue QRP Quarterlies complete. I am desperate for the last issue, as I worry every time that I take the masters in for a reprint that they will be destroyed. Oh, I am the guy with the QQ reprints. If you have an extra copy of the Jan 88 issue, or have one that you don't want, I would very much like to get in touch with you. Also, I am interested in borrowing the small format back issues. Does anyone out there have a complete set? If you have some small issues and would be willing to let me borrow them, I promise to guard them with my life.....72, doug
KI6DS

From qrp-request@Think.COM Mon May 10 18:17:58 1993
From: mvjfm@mvubr.att.com
Date: Mon, 10 May 93 17:17 EDT
Subject: New England Fleamarket

Gang,
Here is what went on at the Rochester NH Swapfest this weekend.

QRP-NE had an official meeting with reports from ;

W1FMR, Club Coordinator
KR1S, Contest Chair
KN1H, Technical Editor
N1CUU, "72" Newsletter Editor
NG1G, Membership Manager
NT1R, Member's News Editor
NN1G, Home Brew Coordinator
NX1K, Field Day Chairman

Mark, NX1K is looking for band captains for FD.
Let him know immediately, as are going to
beat the pants off every other QRP club
this year, and want to do some planning.

Here is what I saw for sale at the Hamfest;

2 HW-8s for \$165 and \$175 - Not sold
2 HW-8s for \$250 ?
0 HW-9, although I heard that 1 went for \$250.
1 Argo 515 for \$350- Sold
1 Argo 515 for \$500 with the TT amp and filter & p.s. etc.- Sold
1 Argosy for \$275 - Not Sold
1 Omni for \$225 - Not Sold
1 Century 21 for \$? - Sold
1 Howes 20m XCVR for \$100 - Sold
1 20m Travel radio for \$175 - ?

Dont know what rigs sold for, but this is what they were asking.

If I had known the guy with the Argosy and Omni
was going to leave, I would have made him an offer.

72 Jim, W1FMR

From qrp-request@Think.COM Thu May 20 11:01:23 1993
Date: Thu, 20 May 93 07:59:52 PDT
From: dh@deneb.csustan.edu (Doug Hendricks)
Subject: NorCal QRP Club

Guys, don't forget the organizational meeting for the NorCal QRP Club will
be held June 6 at the Livermore Swap Meet. Jim, WA6GER and I will have a
booth near the concession stand starting at 9:00 AM. There will be a display
of QRP gear, and you are invited to bring your homebrew projects for show and
tell. I have prepared a 32 page newsletter which will be given to all who
fill out an interest form. (No Charge for the club or newsletter yet). Send
me a message if you can make it. The idea for this club is NO Business
meetings, just get together and show and tell QRP informally like the open
house at Dayton. 72, Doug KI6DS

From qrp-request@Think.COM Mon May 10 11:41:42 1993
Date: Mon, 10 May 93 09:47:25 EDT
From: epacyna@auratek.com (Edward Pacyna)
Subject: Re: Oak Hills Research

Geoff

I've made a number of modifications to the 40M OHR (W7EL) rig that will solve your problems.

Re: Problems w/ high power swbc stations / am detection

Cure is to put a band pass filter between the QSK circuit and the RF port on the SBL1. See appendix of Solid State Design for design info. The second thing that will help is to be sure the SBL1 port is terminated wideband at 50 ohms and change the low pass filter between the IF port and AF amp to have an audio frequency cutt-off.

Re: Problems w/ QRM

The active filter in this design is a peaked low pass with a Q of 5. It doesn't really have great skirts. I usually change the Q to 1 and than install a 7th order elliptical low pass filter (either switched capacitors or L/C passive) between here and the next AF amp. stage. The cutt-off is usually around 800 Hz with a 6:60 dB shape factor of 1.4:1. Works wonders. I've also built a simple bridged twin T notch filter to eliminate the interfering image note from a near by station. However, I have found the RIT to be very useful in this matter. It only tunes one side of zero beat (the side your transmitting on) which is advantageous because the if its the audio image from a nearby station thats causing the QRM, as you adjust the frequency slightly, the image will move away in the opposite direction! Note: RIT's that tune both sides of zero beat don't belong in DC receivers.

If a few more modifications, this is a great little rig.

73's

Ed W1AAZ

From qrp-request@Think.COM Tue May 11 12:41:08 1993
Date: Tue, 11 May 93 12:27:11 EDT
From: epacyna@auratek.com (Edward Pacyna)
Subject: Re: Oak Hills Research

>I have made one modification to the radio. Port 1 of the SBL1 is connected
>to the antenna through a 10 uH choke with two diodes to ground. I assume
>the 2 diodes comprise the QSK circuit and prevent anything more than the
>bias voltage from coming into the receiver. I have added a second diode
>in series with each of the two. This has greatly reduced the AM detection
>problem... and I assume the reason is because you now need twice as much
>voltage to get past the diodes for rectification to take place.

The 2 back to back diodes act as a clamp and limit the voltage to port 1 to about .7 volts when transmitting. By adding series diodes, you increase this voltage (i.e. 2 diodes will allow 1.4 volts). Problem is this. The SBL-1 mixer can handle a limited amount of power before being destroyed. Don't have my data book here at work, but I seem to recall that the unit will handle about 10 milliwatts or so. Power (RMS) is voltage squared divided by impedance. So with 2 diodes in series this works out to be about 39mW. You're correct in that AM rectification now only occurs when a really strong signal occurs. A safer approach would be to get rid of the out of band strong signals with a good band pass filter.

>Is SOLID STATE DESIGN the title of a book?

Yes, Solid State Design for the Radio Amateur published by the ARRL. Very good book.

>The active filter seems to be built around an LM301. If I read correctly,
>by going to a Q of 1 you are literally throwing out that filter and replacing
>it with a SCAF filter. Since you can lower the Q to 1, would it also be
>possible to raise the Q from 5? Wouldn't that be a Q&D way to narrow the
>bandwidth (very, very wide) without adding a lot of circuitry. In your
>SCAF filter, do you use one of the single chip jobs?

Problem with a single stage filter is lousy filter skirts (about 6dB per octave). So if the signal you want to hear has a 500Hz beat note and the interfering station has a 1000Hz note, the QRM will only be 6 dB down. Q determines the bandwidth and # of poles (stages) the skirt shape. I have used both single chip SCAF's and passive L/C filters. They are equal to good crystal filters in terms of shape (6:60dB shape factor of 1.4:1). I made the Q = 1 in the existing stage mainly to get rid of the peak since the bandpass of my filters is flat and to use it as a buffer to isolate the AF preamp and properly terminate the filters I install. While you could change the C ratios and thereby the Q to say 10 in the existing circuit, the shape factor (and out of band) rejection will be very poor. Also, at 500Hz the bandwidth with a Q of 10 will be 50Hz (still no skirt rejection) with a lot of ringing. You're constantly be moving the VFO dial.

>Do you know of any sources where someone has actually published W7EL
>mods to paper?

They have been published in various sources over the years (e.g. QST tech topics, QRP Quarterly by ARCI etc.). Also, send a s.a.s.e. to author of original article and he will send you some modification info..

73's

Ed W1AAZ

>
>

From qrp-request@Think.COM Thu May 13 10:07:25 1993
Date: Thu, 13 May 93 10:07:11 EDT
From: rar3h@phil.cs.virginia.edu
Subject: OHR

I was thinking of buying one of those ORS Spirit QRP rigs. If anyone out there has one I'd like to hear your comments both pro and con.

Thanks
Bob
WA2MFI
rar3h@virginia.edu

From qrp-request@Think.COM Thu May 13 12:32:58 1993
Date: Thu, 13 May 1993 12:18:32 -0400
From: okas_rp%ncsd.dnet@gte.com
Subject: OHR vs MFJ

Hi All,

I'm a relative newbie to qrp and am getting ready to buy a rig. I would prefer a kit. Let me add my request to the already outstanding request for OHR comments. Specifically, I'd like to hear comparisons between the OHR Spirit and MFJ rigs. I operated an MFJ 40m rig last weekend and developed a few opinions about it, mostly favorable.

I'd also like to know if a comment I heard regarding OHR using a DC receiver is true (signal on both sides of zero beat). Seems the MFJ is superhet and receives only on one side of z.b. QSK is kinda hokey, though, and the audio volume could be greater.

Thanks and 72
Bob - N3MBY (now /AE!!)

From qrp-request@Think.COM Thu May 13 09:02:39 1993

Date: Thu, 13 May 1993 09:02:15 -0400
From: Scott Cranston <cranston@zk3.dec.com>
Subject: OHR vs Tejas W7EL radios

I'm trying to decide between the OHR and the Backpacker II flavors of W7EL radio kits. The price difference aside which is the better radio?

Comments/comparisions please.

Thanks
Scott, KB1NW
cranston@zk3.dec.com

From qrp-request@Think.COM Mon May 10 12:44:01 1993
Date: Mon, 10 May 93 12:14:50 EDT
From: epacyna@auratek.com (Edward Pacyna)
Subject: OHR/W7EL Problems

Geoff

I've made a number of modifications to the 40M OHR (W7EL) rig that will solve your problems.

Re: Problems w/ high power swbc stations / am detection

Cure is to put a band pass filter between the QSK circuit and the RF port on the SBL1. See apendix of Solid State Design for design info. The second thing that will help is to be sure the SBL1 port is terminated wideband at 50 ohms and change the low pass filter between the IF port and AF amp to have an audio frequency cutt-off.

Re: Problems w/ QRM

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If a few more modifications, this is a great little rig.

73's

Ed W1AAZ

From qrp-request@Think.COM Thu May 20 21:04:44 1993
From: Kevin Purcell (Rho) <a-kevinp@microsoft.com>
Date: Thu, 20 May 93 18:03:47 PDT
Subject: PACTOR

Is anyone out there using Amtor or Pactor with QRP powers. They seem like excellent candidates for state of the art QRP.

72

Kevin Purcell N7WIM / G8UDP
a-kevinp@microsoft.com

"So much is happening in the world of electronics, but it appears to me that we QRPers are twenty years behind in the analog age."

-- QRP Quarterly Editorial, April 1993

----- message from INFO-HAMS -----

Date: Sat, 15 May 1993 17:45:57 GMT
From: valinor.mythical.com!n5ial!jim@uunet.uu.net
Subject: AMTOR question
To: info-hams@ucsd.edu

In article <1svucr\$spl@charm.magnus.acs.ohio-state.edu>
wvanhorn@magnus.acs.ohio-state.edu (William E Van Horne) writes:

>Dear Rob:

>Pactor [....] is very similar to AMTOR but
>with several advantages that make it considerably more pleasant to
>use.

Such as the fact that (based on my usage so far), it's *VERY* bulletproof. We're talking someone tuning up right on top of a QSO I was in, and it had no apparent impact at all, even though the carrier was considerably stronger than the person I was working on PacTOR. Also, it seems that it's a lot less sensitive to QSB than normal AMTOR, too.

Put it this way...right from the very start, I've been impressed as h*ll with PacTOR. :-)

>If you have the PK-232MBX, you can get PACTOR by simply buying
>the new "firmware" from AEA for \$85.00.

Kantronics provides an upgrade for the KAM, as well (this is how I got on PacTOR). Basically, it's the version 6.0 firmware.

--jim

--

#include <std_disclaimer.h>

73 DE N5IAL (/4)

INTERNET: jim@n5ial.mythical.com | j.graham@ieee.org ICBM: 30.23N 86.32W
AMATEUR RADIO: n5ial@w4zbb (Ft. Walton Beach, FL) AMTOR SELCAL: NIAL

E-mail me for information about KAMterm (host mode for Kantronics TNCs).

From qrp-request@Think.COM Tue May 25 16:13:20 1993
Date: Tue, 25 May 1993 15:12:52 -0500 (CDT)
From: "Jeff M. Gold" <JMG@tntech.edu>
Subject: Paddles

Just want to throw my 2 cents in:

I use a set of hand made solid brass Schurr mini-paddles in my car. They are the best paddles I have ever had my fingers on. I think they cost me \$95 delivered, but I feel they were well worth it.

I made a set of paddles using the center section of a plexiglass organizer and used 2 RS electrical switches. Used the filler pieces from a PC slot and bent them around for the arms, and then added 2 curved finger pieces of plexiglass. Mounted the whole thing on a piece of pine and stained the wood. Looks pretty nice and works darn close to my benchers.. but cost me less than \$5.00

73

Jeff, AC4HF

From qrp-request@Think.COM Wed May 26 11:09:00 1993
Date: Wed, 26 May 93 15:01:27 GMT
From: jkearman@arrl.org (Jim Kearman)

Subject: Q DOPE, Part Deux

I checked around and found out that Q Dope consists of polystyrene dissolved in a solvent like xylene. Duco cement is supposed to work as well. No one here had used nail polish, so no input possible.

KR1S

--

Looking for historical information on the GRC-109 radio set.

jkearman@arrl.org

From qrp-request@Think.COM Wed May 26 11:22:24 1993
Date: Wed, 26 May 93 11:20:52 EDT
From: jmichael@vnet.IBM.COM
Subject: Q-dope

I suspect that Dave's Flexament from your local fly shop might work well for this application.

Jim Michael

From qrp-request@Think.COM Wed May 26 08:47:41 1993
Date: Wed, 26 May 93 07:47:26 -0500
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: Re: Q-Dope

i use the clear finger nail polish also. i've heard, but have not confirmed but do believe, that colored nail polish could possibly affect the Q and also the tuned circuit.

as in all cases, not too much and too little should be applied. the purpose of the nail polish is to hold the windings in place through all kinds of physical conditions.

nail polish is cheap, i got two bottles for \$1.00 USA at a drug store. it'll last me a long time. one bottle of Q-Dope will run about \$3.00 or more.

my \$0.02, 72 de k5fo dit dit

Chuck Adams, K5FO @ 70+ wpm cw

adams@sgi.com

From qrp-request@Think.COM Tue May 25 16:15:36 1993
Date: Tue, 25 May 93 16:13:08 EDT
From: Frank.Milos@East.Sun.COM (Frank Milos - Sun USOPS CSU Manufacturing Engineering)
Subject: Q-dope?

I'm putting the finishing touches on the OHR HP-QRP 40 xcvr and need the advice of some diehard homebrewers.

After aligning the receiver, the instructions recommend putting Q-dope on the windings. What is it, where can you get it, and is there anything else you can use that is easier to get a hold of?

Can you use a hot melt glue?

Thanks for your help!

72

Frank - N01E

From qrp-request@Think.COM Wed May 26 09:38:30 1993
Date: Wed, 26 May 93 13:25:51 GMT
From: jkearman@arrl.org (Jim Kearman)
Subject: Q-dope?

Frank.Milos@East.Sun.COM (Frank Milos - Sun USOPS CSU Manufacturing Engineering) writes:

>I'm putting the finishing touches on the OHR HP-QRP 40 xcvr and
>need the advice of some diehard homebrewers.
>
>After aligning the receiver, the instructions recommend putting
>Q-dope on the windings. What is it, where can you get it, and is there
>anything else you can use that is easier to get a hold of?
>
>Can you use a hot melt glue?
>
>Thanks for your help!
>
>72
>

>Frank - N01E

>

>

Q dope is/was a liquid plastic of high viscosity. The fumes would knock you out. It worked well at holding coil turns in place and had little effect on coil Q.

Polyurethane will work about as well. I wouldn't use hot glue.

Most homebrewers don't use anything. If you wind the coil tight it won't move much. If you don't "dope" the coil you can take off the wire and use the toroid again. This may not be as much of a concern for a kit. I guess I'd dope the VFO coil of a rig that might get bounced around in a backpack.

KR1S

--

Looking for historical information on the GRC-109 radio set.

jkearman@arrl.org

From qrp-request@Think.COM Tue May 25 19:27:10 1993
Date: Tue, 25 May 93 16:27:05 PDT
From: paulb@harley.tti.com (Paul Blumstein)
Subject: Re: Q-dope?

Frank - N01E:

+I'm putting the finishing touches on the OHR HP-QRP 40 xcvr and
+need the advice of some diehard homebrewers.

+

+After aligning the receiver, the instructions recommend putting
+Q-dope on the windings. What is it, where can you get it, and is there
+anything else you can use that is easier to get a hold of?

I've heard that many use clear nail polish.

From qrp-request@Think.COM Thu May 20 18:18:15 1993
Date: Thu, 20 May 93 17:18:01 -0500
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: QQ Reprints

Doug, KI6DS, posted last week, while i was in houston, a note about the reprints for the QRP Quarterly.

as a satisfied customer, let me say, i bought the complete set. they arrived in a timely manner and were as advertised. it is nice to have each year bound separately in what is called the 'comb' binding, you know, the plastic multiple hole through the paper like slots that lies flat. the series make interesting reading, lets you catch up on what you missed, if you have been inactive in the QRP ARCI.

as photocopied material, in general the photos came out rather well. some problems with original material that wasn't all that great in the first place -- bad contrast, etc.

someone in letters to the editor recently inquired whether anyone was going to do a 'best of QQ'. i thought of it about a minute and then knew that i wouldn't do it. no money in it -- fame maybe, but definitely not much money.....

72 de k5fo dit dit

Chuck Adams, K5FO @ 70+ wpm cw
adams@sgi.com

From qrp-request@Think.COM Thu May 20 22:59:10 1993
Date: Thu, 20 May 93 21:58:53 -0500
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: QQ Reprints

in order to save my typing skills, i thought i would reply to the numerous inquiries via the group.

QQ Reprints were announced in the Oct 1992 issue of QQ. they are available for years 1985 through 1991. 1992 should be available soon. of course we are in 1993, so that'll be next year.

they are \$10 per year or get all 7 years for the one time price of \$60. shipping and handling is \$3 per order.

Doug Hendricks, KI6DS, 882 Frank Street, Dos Palo, CA 93620.

i am not associated with this offer, just believe in the accumulation and dispersal of information.....

inquiring minds wanna know.....

72 de k5fo dit dit

Chuck Adams, K5FO @ 70+ wpm cw
adams@sgi.com

From qrp-request@Think.COM Fri May 28 16:05:03 1993
Date: Fri, 28 May 93 16:02:47 EDT
From: diana@Kodak.COM (Gary Diana)
Subject: QRP at HamComm?

Hello Fellow QRPers -

Anyone know if there is going to be any QRP activities/
talks/etc at hamcomm (June 4th -> 7th)?

72, Gary N2JGU
gmdiana@kodak.com OR
diana@sneaks.kodak.com

From qrp-request@Think.COM Sat May 8 20:52:40 1993
From: andrews@fmsystem.ncoast.org (Andrew Sargent N80FS)
Subject: Re: QRP calling freqs
Date: Sat, 8 May 1993 20:19:45 -0400 (EDT)

> here is the list, as i have it for the internationally recognized
> QRP calling freqs +/- QRM.....
>
> BAND CW SSB
>
> 6 50.060 50.885 (this may be 50.300 now because of R/C airplanes)
 ^^^^^ ^^^^^
I thought it I thought it
was 50.030 but was 50.225 but
what do I know? what do I know?

I'm only a lowly (low-life) no-code tech, I'm not allowed to do CW anyway.

--

..
..

-- -- -- -- --

From qrp-request@Think.COM Sat May 8 20:52:46 1993
From: andrews@fmsystem.ncoast.org (Andrew Sargent N80FS)
Subject: Re: QRP calling freqs
Date: Sat, 8 May 1993 20:19:45 -0400 (EDT)

> here is the list, as i have it for the internationally recognized
> QRP calling freqs +/- QRM.....
>
> BAND CW SSB
>
> 6 50.060 50.885 (this may be 50.300 now because of R/C airplanes)
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I thought it I thought it
was 50.030 but was 50.225 but
what do I know? what do I know?

I'm only a lowly (low-life) no-code tech, I'm not allowed to do CW anyway.
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From qrp-request@Think.COM Mon May 10 10:21:06 1993
Date: Mon, 10 May 93 07:16:29 PST
From: "Thorburn_Gary" <thorburn@sceng.UB.com>
Subject: QRP for the masses ??

Who am I ?? -- I'm a rather inactive "novice" ham, (altho my license level is "general"!). Not a true QRPer, my equipment is a standard Japanese transceiver with power usually cranked down, feeding a couple simple antennas. Of the time I have to spend on Amateur Radio, 95% is spent just listening, trying to increase my CW speed.

Words of appreciation -- since I've been on this mailing list, I've learned a lot; thanks for less flaming of new and no-code hams than I see elsewhere. I also have learned that homebrewing on a budget is still alive and well among hams, this is how I became interested many years ago. (though my interest and license lapsed for many years).

Suggestion -- Certainly QRP is a fascinating sub-hobby of

Amateur Radio. But a recent message from Chuck Adams (I think) made me wonder: is the QRP community instilling in the Ham community at large some "QRP Awareness"? By that I mean, given the sensitivity of modern receivers, why can't all of us, operating HF above Five Watts, simply try to DE-ESCALATE our power by 50%. I find that 50 watts is almost always as effective as 100. Has there ever been an attempt to promote a voluntary "barefoot day" on one of the standard bands?

36.5 de KB1AIF

From qrp-request@Think.COM Thu May 27 09:00:43 1993
From: Paul Kranz <kranz@hp-and.an.hp.com>
Subject: QRP in the Dark Ages
Date: Thu, 27 May 93 8:57:16 EDT

Comment on QRP Quarterly Editorial, April 1993 noted by Kevin Purcell copied below.

Kevin Purcell N7WIM / G8UDP
a-kevinp@microsoft.com
"So much is happening in the world of electronics, but it appears to me that we QRPers are twenty years behind in the analog age."
-- QRP Quarterly Editorial, April 1993

This editorial captured my interest also. However, try building a state of the art synthesized VFO or receiver for the cost and simplicity that you can with antique analog parts. Digital filters and switched capacitor filters offer much improved performance but require many more components.

My favorite quote:

The world is an analog stage on which digital designers play but bit parts!

Paul Kranz, W1CFI
kranz@hp-and.hp.com

From qrp-request@Think.COM Thu May 27 10:03:44 1993
Date: Thu, 27 May 93 10:03:37 -0400
From: Gary Bishop <gb@cs.unc.edu>
Subject: QRP in the Dark Ages

Paul Kranz <kranz@hp-and.an.hp.com> writes:

"Digital filters and switched capacitor filters offer much improved performance but require many more components."

I have heard this from many different people but I still don't believe it. We can still get better dynamic range and noise performance out of purely analog systems than we can digital systems. Most of the current state-of-the-art ham radios suffer from terrible birdies and background crud that originates in the digital subsystems. I haven't seen a switched capacitor filter that offers much more than 80dB dynamic range.

I dream of an all analog receiver that is entirely quiet when no real signals are present.....

My favorite quote:

Digital is just a state of mind....

Gary Bishop wa4fut

From qrp-request@Think.COM Thu May 27 11:23:15 1993
From: Kevin Purcell (Rho) <a-kevinp@microsoft.com>
Date: Thu, 27 May 93 08:21:38 PDT
Subject: RE: QRP in the Dark Ages

You plan on operating this RX at absolute zero I propose. Quiet receivers are really cool :-)

However, that said, I wouldn't call the everyday homebrew QRP rig with a FET VFO/buffer/driver/PA and the RX with a level 7 diode DBM state of the art. It could be improved on and with not a lot of increase in complexity.

Who cares if the DR of a SCF is 80dB if its after the AGC system (in audio or low IF). Same with DSPs. They're not must use above a low IF but you can do plenty of useful things with them (how about an accurate phasing/third method SSB modulator -- much easier to do digitally than with 1% analog components). Hybrid systems will give the best performance currently, but perhaps we'd like to get some experience with digital systems before everything turns fully digital.

One vague plan I have is for a generic VFO (kinda like W1CER/W1FB VFO published through the 1970s and 80s) based around a DDS system and a microcontroller. The nice thing about this is that you could build it

without any great test equipment. Drift goes away (good for portable work). You get any ranges you want, any IF offset, split operation for TX/RX, FSK, memories, nice UI (optically encode knob), menus on an LCD. All these features are set from the front panel so you could use it on a DC RX (with the 700Hz TX offset) or on your homebrew 4.43Mhz IF strip (with the appropriate offset set up). Add an extra optical encoder for RIT or a separate RX tuning control for operating split.

You can't do this with you analog VFO (unless you put a lot MORE effort into it that building the DDS system). There are still problems with DDS but there are problems with the older style too.

And at the rate costs are dropping you could build one for \$100 to \$150. Just build one and use it on you experimental rigs.

The reason I included the quote was to try to get a few more people to think about this. Sure, CW QRP is fun, but it has been done.

I also note that I got no replies to my earlier post asking if anyone is trying QRP Amtor, Pactor and so on. Is there anyone trying these modes QRP?

72

Kevin Purcell N7WIM / G8UDP

a-kevinp@microsoft.com

"So much is happening in the world of electronics, but it appears to me that we QRPers are twenty years behind in the analog age."

-- QRP Quarterly Editorial, April 1993

From qrp-request@Think.COM Thu May 27 12:49:30 1993

From: Kevin Purcell (Rho) <a-kevinp@microsoft.com>

Date: Thu, 27 May 93 08:21:38 PDT

Subject: RE: QRP in the Dark Ages

You plan on operating this RX at absolute zero I propose. Quiet receivers are really cool :-)

However, that said, I wouldn't call the everyday homebrew QRP rig with a FET VFO/buffer/driver/PA and the RX with a level 7 diode DBM state of the art. It could be improved on and with not a lot of increase in complexity.

Who cares if the DR of a SCF is 80dB if its after the AGC system (in audio or low IF). Same with DSPs. They're not must use above a low IF but you can do plenty of useful things with them (how about an accurate phasing/third method SSB modulator -- much easier to do digitally than with 1% analog compnents). Hybrid systems will give the best performance currently, but perhaps we'd like to get some experience with digital systems before everything turns fully digital.

One vague plan I have is for a generic VFO (kinda like W1CER/W1FB VFO published through the 1970s and 80s) based around a DDS system and a microcontroller. The nice thing about this is that you could build it without any great test equipment. Drift goes away (good for portable work). You get any ranges you want, any IF offset, split operation for TX/RX, FSK, memories, nice UI (optically encode knob), menus on an LCD. All these features are set from the front panel so you could use it on a DC RX (with the 700Hz TX offset) or on your homebrew 4.43Mhz IF strip (with the appropriate offset set up). Add an extra optical encoder for RIT or a separate RX tuning control for operating split.

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I also note that I got no replies to my earlier post asking if anyone is trying QRP Amtor, Pactor and so on. Is there anyone trying these modes QRP?

72

Kevin Purcell N7WIM / G8UDP
a-kevinp@microsoft.com

"So much is happening in the world of electronics, but it appears to me that we QRPers are twenty years behind in the analog age."

-- QRP Quarterly Editorial, April 1993

From qrp-request@Think.COM Fri May 28 14:19:18 1993
Subject: Re: QRP in the Dark Ages
Date: Fri, 28 May 1993 10:37:56 -0500 (CDT)
From: Victoria Welch <vikki@precipice.chi.il.us>

In your article <9305271521.AA06956@netmail.microsoft.com> ["RE: QRP in the Dark Ages"], you wrote:

> You plan on operating this RX at absolute zero I propose. Quiet
> recievers are really cool :-)

I love it :-)))

> [...]

>

> The reason I included the quote was to try to get a few more people to
> think about this. Sure, CW QRP is fun, but it has been done.

>

> I also note that I got no replies to my earlier post asking if anyone
> is trying QRP Amtor, Pactor and so on. Is there anyone trying these modes QRP?

This is one that I meant to respond to, but I have just been too busy before now (well, I am still busy, but taking the time anyway :). This is the first test to responding to the local newsgroup that I am piping the qrp mailing list into at this site, hopefully it will work.

I have done some AMTOR using QRP mode and the results were **quite** encouraging. I was running an AMTOR switch for the local MARS area and uplinking to a site in MO (we are about 45 miles NNW of Chicago, just barely in ILLinois). Running 250 mw I was able to maintain a reliable link 90%+ of the time (7.5 MHz with an antenna cut for 4.5 MHz about 15' off the ground (and around the building and through the trees :)). On a good day I could run down to 10 mw and on a bad day 100W wouldn't work. Most of the time I was running 250 mw and 99% of the time no more than 5 watts. I am looking forward to trying this with PACTOR as soon as I can find the time and someone who can play. From all I have heard, PACTOR is **considerably** more robust than AMTOR, so it should be very interesting.

With the PK-232 and the Yaesu FT-747GX, I could also do RTTY and other modes. When my husband gets the digital front pannel (microcontroller variety) on his digital rig, I'll have a **real** qrp rig to do this on :).

Someone asked about the DDS article in 73 and the cost of the Qualcomm DDS chip. As I recall, it is about \$100 in quantity one, but the guy selling the kits gets a better price because of quantity.

My husband is the one that wrote the "Techno-Wizzy" articles and if you have questions on this, he does read this newsgroup (mailing list) but stays too busy to do much more than that (he spends a lot of time building), however he does keep up with mail. If you write him c/o this site, you will get a response (jjw@precipice.chi.il.us).

Looking forward to hearing more on digital modes an QRP. Also QRP on the satellites (done some - not real successful with the cushcraft AOP-1 antennas (they stink)). Still like to play on RS-10, if anyone is interested, we can see what I can do from here, although I have **very** limited antennas (but we are still **much** luckier than most apartment dwellers :).

> "So much is happening in the world of electronics, but it appears
> to me that we QRPers are twenty years behind in the analog age."
> -- QRP Quarterly Editorial, April 1993

Some of us are trying to change that. also, don't forget to give credit where it is due. A *much* higher percentage of QRPers *can* and *do* build things, IMNSHO it *still* puts them a long way up my list of esteem. Anyone can write a check and plug in power and have an antenna installed and qrm others off the air because they don't have a clue... (no, I am not overly impressed with QRPARCI :).

Take care es 73/gud dx, Vikki.

--

Vikki Welch, SysAdm Welch Research, WV9K, DoD#-13, NEIQR #13
vikki@precipice.chi.il.us(daily), vikki@wv9k.atl.ga.us(weekly)

From qrp-request@Think.COM Thu May 27 09:25:28 1993
Date: Thu, 27 May 93 13:23:24 GMT
From: jkearman@arrl.org (Jim Kearman)
Subject: QRP Operation in Tanzania

I'll be posting as soon as I know his departure date.

>

>

>From: Simon Browne <esrlb@csv.warwick.ac.uk>

>Subject: Re: 5H trip etc

>To: jkearman@arrl.org (Jim Kearman)

>Date: Wed, 26 May 1993 22:26:55 +0100 (BST)

>

>Jim, Many thanks indeed for all the info. It sounds like the WARC bands are
>'in' then, which is good news.

>

>It's difficult to get info out of Tanzania at any speed it seems, so I haven't
>heard yet whether the licence has been cleared etc, but I was assured there
>would be no problem. The work I'm doing out there is a joint venture with the
>Tanzanian PTC, so that should help, anyway.

>

>I've just been playing with the 735 here, and after a bit of searching,
>have found and adjusted a pot which sets the low power level. Not sure why
>this mod doesn't seem common, as it's far easier than messing about feeding
>negative voltages into the ALC socket! Looks like it's taken the power at the
>low end of the scale down to a watt or two, but the lab power meter is away
>for a couple of days, so I can't measure too accurately.

>

>I intend to do some QRPing in 5H, as it'll be a nice one on 2 way
>QRP for those that are into QRP DXing.

>

>All the best,

>

>Simon GOGWA.

>

>
>--
>
>Simon Browne | es237@eng.warwick.ac.uk
>Communications Lab. | esrlb@csm.warwick.ac.uk
>Engineering Dept. |
>Warwick University | 0203-523523 extn 2548.
>Coventry, UK. |
>
>

From qrp-request@Think.COM Fri May 28 00:02:09 1993
Date: Thu, 27 May 93 23:01:46 CDT
From: msdooley@rockdal.aud.alcatel.com (Michael S. Dooley)
Subject: qrp pactor rtty

Whoops... My first message went to QRP-REQUEST... Sorry, that's also my first message to this mail list although I've been listening for about a month. Anyway, my friend Paul Nix (WB5AGF) was just telling me about his contact with Pete Hoover (don't remember the call) and said Pete was using a laptop with the British BKMULTY (?) software, an argonaut (sp?) 2 and a beam and operating at 5 watts. Paul was very impressed. (me too)... I got off limited HF (to none) about 18 months ago, but my fingers are getting itchy... and Hamcom is comin... and I've been wath watching the QRP construction articles for a couple years... Looks like the bug (vibroplex?) is about to bite!!!
Mike Dooley KE4PC

From qrp-request@Think.COM Fri May 21 11:15:11 1993
Date: Fri, 21 May 93 08:13:41 PDT
From: dh@deneb.csustan.edu (Doug Hendricks)
Subject: QRP Quarterly Reprints

Guys, I now have the 1992 issues ready to go. The complete set offer is all 8 issues, 1985 - 1992 for \$73 post paid. If you want individual issues, by the year, they are \$10 per year plus \$3 total postage.

My Address is: Doug Hendricks
862 Frank Ave.
Dos Palos, CA 93620

I am doing this as a service. The printing and binding cost are about break even for what I am charging. The issues are bound in 1 year issues with the plastic comb binder and have a heavy cardboard cover...72, Doug KI6DS

From qrp-request@Think.COM Thu May 27 14:56:12 1993
Date: Thu, 27 May 1993 14:55:50 +0500
From: fkf1@cornell.edu (F. Kevin Feeney)

Subject: qrp rtty

>The reason I included the quote was to try to get a few more people to
>think about this. Sure, CW QRP is fun, but it has been done.

Agreed - I'm interested in trying some other qrp stuff. LIke rtty. And I
have some ideas for a cheap, qrp cw oscar station...for backpacking. :-)

>

>I also note that I got no replies to my earlier post asking if anyone
>is trying QRP Amtor, Pactor and so on. Is there anyone trying these modes QRP?

>

Ah, didn't get around to posting it yet kevin. I have done a little
playing with QRP digital modes. I've run RTTY with a kam and my argosy in
the 5 watt position (power amp switched right out) and been reasonably
successful. I ran a little amtorg that way too, but then I sold the kam and
stopped running that stuff mobile - but I'm getting back to it this summer.
The setup was kinda neat for lunchtime qso's - sit in the car with the door
ajar and type on the old laptop. During rtty contests I made about 25
contacts in 2 hours running 5 watts one evening from mediocre antennas and
no real competitive drive. Just fooling around. Nobody seemed to notice I
was qrp.

Recently I've been experimenting using hamcom and the 741 zero crossing
detector as a demodulator and an HW8. Works surprisingly well, as long as
the signal is in the clear - harder to do with a DC receiver. Next step is
to diddle the offset circuitry to get fsk - it looks like that will be
pretty simple. I think that I will go to the extra effort of building a PLL
modem based on an exar 2211 or something to get a little better demodulator
and then use some other Rtty software and go experiment. If that works,
then I look into fast enough switching to do AMTOR.

(probably just replace the hw8 relay with a reed unit and redo the timing
on the driver to eliminate the hang)

I'd like to do a superhet based rig someday that would have FSK built right
in (yeah DDS would make that easy) and a good tight filter for rtty/amtorg.
I haven't yet tried pactor - maybe when I get the simple modem working I'll
look into BKMULTY software or something for that mode. I've heard good
things about it.

DDS wise, as long as you are dragging around a computer to do rtty and
stuff, might as well use that to do all the tuning/offset computations, etc
on the rig. Might be able to reduce a reasonably simple rig to a semi-black
box. That isn't my first choice for ergonomics, but as long as I have to
carry the computer for other tasks, I can consider using it to simplify the
radio.

Anybody know about the qualcom DDS transmitter that somebody did a while

back in 73? What's one of those chips cost?

Kevin, WB2EMS

From qrp-request@Think.COM Thu May 27 17:22:45 1993
Date: Thu, 27 May 1993 17:22:33 +0500
From: fkf1@cornell.edu (F. Kevin Feeney)
Subject: qrp rtty

Crossmode contacts between cw and rtty sound neat. I think it would be pretty easy to do that from most multimode controllers, with maybe a few extra keystrokes to change between modes during turnovers.

The other thing that struck me is there is no reason not use high speed cw from computers. It's not as robust as an fsk mode, especially the ones that use error correction, but if the signal is steady and clear I've used things like PK232's at 50 wpm, faster than i can type! :-) Even with QRO it's not a bad idea, the duty cycle is kinder to the radios and on a strong link it's as good as RTTY.

Hmmmm - keeping with cw and a multimode controller (simple qrp rig, standard cw capable controller like a 232 or kam) - I wonder if you could write a simple program to replace the terminal program on the computer to use cw as the medium but overlay some sort of forward error correction or redundancy layer on top of it. I.e. - you type "Name is kevin, qth is ithaca ny" and maybe the software outputs something like "NNAAMMEE IISS KKEEVVIINN ,, QQTTHH IISS IITTHHAACCAA" and then on the receive end the software looks for the paired letters and prints a _ for any that weren't doubled up - i.e. corrupted data, and takes the pair and converts them back to singles.

I remember seeing something about using a modified form of cw like that for moonbounce work way back when. There was some sort of modified code that took two letters that were easily recognised and hard to mess up with dropouts (libration fade?) and decoded back to regular cw.
(anybody else remember more about that?)

Anyway, just some thoughts about machine decoded transmission and simple qrp gear. I'm interested to hear about anybody else's ideas. Let's play!

Kevin - WB2EMS

F. Kevin Feeney
Network Video Engineer

172 Caldwell Hall
Cornell University
Ithaca, NY 14853-2602
Phone - (607) 255-5186
FAX - (607) 255-5771
EMAIL - fkf1@cornell.edu

From qrp-request@Think.COM Thu May 27 15:48:59 1993
Date: Thu, 27 May 1993 12:52:33 -0800
From: burdick@interval.com (Wayne Burdick)
Subject: Re: qrp rtty

I haven't actually done QRP RTTY but I've done something related and rather bizarre with good results: work CW/RTTY crossmode. I have a homebrew TTY reader with a 16-character display that hooks up to the audio output of the rig. I tune in a strong RTTY signal calling CQ, then call them with 1-watt of CW. The TTY operators are a polite bunch, and I never fail to get a callback from a strong station. I've found that some of them use software that can send TTY and receive CW, in which case I speed up.

Try it! By the way, there must be a zillion good cheap TTY readers around, but if anyone's interested I'll send them the schematic for mine.

72,
Wayne

Wayne Burdick
wayne@interval.com
(415) 354-0928

Interval Research Corp.
1801-C Page Mill Road
Palo Alto, CA 94304

From qrp-request@Think.COM Thu May 27 19:50:44 1993
Date: Thu, 27 May 93 15:05:37 CDT
From: Ken.Hopper@Central.Sun.COM (Ken Hopper SE Chicago Loop)
Subject: Re: qrp rtty

I'm just a casual RTTY/AMTOR/PACTOR operator, but wanted to comment that I am using the BMKMULTY software from the BARTG (British) group and find it to be a pleasure to use.

I purchased the PACTOR module and have used it for only a couple of contacts on 20M. I also use their TU (the MULTY-TERM unit) and it has worked flawlessly for two years. Their sw/hw is excellent.

I recently started using a PASOKON SSTV board in my PC and have been bitten BIG TIME by the beautiful SSTV

images flying on 14.230.

I typically run 20-40W from my Ten Tec Omni-V, so I guess I am a QRO op on Digital modes :-) I rarely have a problem being heard on my W9INN dipole or Butternut Vert.

One of these days I'm gonna' build an Oak Hills Spirit, but first I've got to get a good color frame grabber for SSTV :-)

73,

Ken - November Nine Vivid Video

P.S. And, yes Chuck (K5F0) I can still copy 50 wpm on a good day :-)

From qrp-request@Think.COM Mon May 10 02:08:19 1993
Date: Sun, 9 May 93 23:07:04 PDT
From: dh@altair.csustan.edu (Doug Hendricks)
Subject: QRP WATTMETER

I built the qrp wattmeter that was written up in Sprat 61 and Jan 92 QQ, page 10. I have mine calibrated for a 5 watt and a 1 watt scale. Used 50 trimpots to set the scale against my OHR WM-1. I used FT50-43 toroids. Neither article specifies which toroids to use, but I got my idea that it was the 43 material from building the OHR and from Mike Czahajewski's column in the latest issue of QQ, April. Fun project and neat. Cul, 72, Doug KI6DS

From qrp-request@Think.COM Mon May 10 13:02:13 1993
Date: Mon, 10 May 93 10:02:07 PDT
From: paulb@harley.tti.com (Paul Blumstein)
Subject: Re: QRP WATTMETER

Doug Hendricks types:

+... building the OHR and from Mike Czahajewski's column in ...
^^^^^^^^^^^^^^^^

I'm glad that isn't one of the words on CW tests !-)

From qrp-request@Think.COM Mon May 10 02:09:37 1993
Date: Sun, 9 May 93 23:08:24 PDT
From: dh@altair.csustan.edu (Doug Hendricks)
Subject: qrp wattmeter correction

My bulletin on QRP Wattmeter should say I used 50K trimpots to set the scale. Sorry about that guys! 72, Doug

From qrp-request@Think.COM Fri May 14 01:19:09 1993
From: mvjfm@mvubr.att.com
Date: Thu, 13 May 93 09:46 EDT
Subject: Radios

Scott,
At the QRP suite, Dayton, I had a chance to try the OHR W7EL
kit with a OHR Switched Capacitor filter, and it was excellent.
I mean excellent !!!

Tejas was represented at the suite, but I did not see the
radios for comparison, this year, or last.

Radio Kit in Pelham NH, some very interesting offerings !!
Make sure you send for thier list.

And Wayne, N6KR has a very interesting backpacking radio
in the wings. He is available on this internet network.
I showed prelim info on his rig to about 20 hams this
weekend, and they were quite impressed.

Also NN1G designed a very nice superhet for 20m, featured
in the QQ.... Although not in kit form, boards are available
from Far ckts.

I would recommend geting to Dayton.
At the QRP hospitality suite this year were;
MFJ, Howes, Kanga (G0BPS),
OHR, ARC 40, Tejas, Radiokit,
FAR Circuits, Gary Breed (K9AY),
Optomized XCVR (W7EL), W7ZOI,
and others, to talk to, try the rigs,
and ask questions of.

Jim, W1FMR

`p

From qrp-request@Think.COM Fri May 14 10:41:58 1993
Date: Fri, 14 May 93 10:39:40 EDT
From: Frank.Milos@East.Sun.COM (Frank Milos - Sun USOPS CSU Manufacturing
Engineering)
Subject: Re: RADIOS

In Jim's message to Scott regarding radios and sources, he writes...

>>Radio Kit in Pelham NH, some very interesting offerings !!
>>Make sure you send for thier list.

This was my experience with Radio Kit.

When I was looking for QRP parts and kits, I started writing to all the companies for catalogs to see what was available. I sent my request in with \$1 (cash) and waited. A month and a half later, I still didn't get a catalog and thought that it might have been lost in the mail since it was around the holidays. I sent another letter and yes, another \$1 (cash). Again, no catalog. I called Radio Kit this time and asked about getting a catalog. Carl told me they were out and didn't know when they were getting more.

Most companies acknowledge when out of catalogs or send one when available. It's been over a year now and I haven't received anything. I suppose I should have used a check but I didn't think it was necessary. I have no complaints, I just take my business elsewhere.

That was my experience...

72

Frank - N01E

From qrp-request@Think.COM Fri May 14 12:59:30 1993
Date: Fri, 14 May 1993 12:45:00 +0000
From: "Michael (W.M.) Babineau" <babineau@bnr.ca>
Subject: Re: RADIOS

Frank wrote :

> This was my experience with Radio Kit.
>
> When I was looking for QRP parts and kits, I started writing to all
> the companies for catalogs to see what was available. I sent my request
> in with \$1 (cash) and waited. A month and a half later, I still didn't get
> a catalog and thought that it might have been lost in the mail since it
> was around the holidays. I sent another letter and yes, another \$1 (cash).
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> catalog.
> Carl told me they were out and didn't know when they were getting more.

>
> Most companies acknowledge when out of catalogs or send one when available. It's
> been over a year now and I haven't received anything. I suppose I should
> have used a check but I didn't think it was necessary. I have no complaints,
> I just take my business elsewhere.
>
> That was my experience...
>
> 72
>
> Frank - N01E
>

This is also what happened to me about a year ago. I sent them a US money order and haven't heard a peep from them! Hmmm, seems to be a pattern here.

Michael - VE3WMB

From qrp-request@Think.COM Tue May 11 11:13:15 1993
Date: Tue, 11 May 93 08:07:34 PST
From: Rob_Ontiveros_at_Notes-Gate@sceng.UB.com
Subject: Ramsey QRP Kit

I have a question regarding Ramsey QRP kits. Mainly, have any of you built/use this kind of rig? If so what is your opinion on its performance. Also how was the quality of the kit ie.. did it have the correct components, was the documentation correct etc...? Any feedback would be appreciated!!
TNX

73 de KC6ZTT (Rob)

From qrp-request@Think.COM Tue May 11 14:02:54 1993
Date: Tue, 11 May 1993 11:01:56 PDT
From: Mike_Beezley.houstoncssc@xerox.com
Subject: Re: Ramsey QRP Kit

Rob

>> Mainly, have any of you built/use this kind of rig?...
<<

I built the 40M QRP rig and found it to be a pleasant experience. All the parts were there and they were the correct ones. The little 'bugger' actually worked the first time I fired it up after construction. The only drawback was

that I am a tech and the crystals that came with the kit were out of my allocation. I ordered others from JAN and read the specifications right out of the construction manual to the lady at JAN. a couple of weeks later in came my crystals. They were not the same case style as the original kit crystals but they were the correct freq. I plugged one in and the rig made this awful 'wwwhhhheeeppp-whhhheep!' noise. I played with it for a while and surmised that they were not the appropriate capacitance for the oscillator circuit. I still have not gotten around to playing with modifying it....one of these days ;-).

That is not to say the kit is bad but either Ramsey's specs were wrong or JAN didn't follow the specs I read to the order taker right out of the manual. I have built other Ramsey kits with varying levels of satisfaction. But, my biggest disappointment was building the 2m rig. They lead you to believe from the ads that you can build the unit and get it operational with nothing more than a meter. I have not sent it back to them yet to get them to align it but it definitely takes more than just a meter and a shortwave radio as they suggest in the construction manual.

Good luck with what ever QRP rig you dive into. It should be fun.

73 de N5PWP
__mike
MBeez.HoustonCSSC@Xerox.COM

From qrp-request@Think.COM Mon May 10 09:25:19 1993
Date: Fri, 07 May 93 17:41:33 GMT
From: jkearman@arrl.org (Jim Kearman)
Subject: Reducing power on IC-735

hlester@as.arizona.edu (Howard Lester)

>>On the negative side, however, if you're a wall paper collector don't forget
>>that neither the big contests nor DXCC include 30.

>

>>Jim K5YUT

>

>

>A week or so ago I worked a 3B8 on 30, admittedly with full 100
>watts....Anyway, that's halfway around the world. I'd say DX is out there,
>"even on 30!"

>

>By the way, I've heard of 3 ways of getting the power down to 5 watts on my
>IC-735: One is an internal switch that changes the power range from 10-100W
>to 5-50W; another is constructing something to insert into the ALC jack in
>the back of the rig; and a third is adjusting some internal control. The
>first option is out of the question; the second is, well, I don't like
>messing with stuff like that; and the third is, well, I don't like messing

>with the internals. Any other ideas?

>

>Howard KE7QJ

>

>

In "Your QRP Operating Companion" you'll find a circuit using a pot and a battery that I personally tested in the ARRL Lab. You won't hurt the rig. C'mon Howard, this is what ham radio is all about!

72, Jim, KR1S

--

jkearman@arrl.org

From qrp-request@Think.COM Fri May 14 01:21:43 1993

From: mvjif@mvubr.att.com

Date: Thu, 13 May 93 09:51 EDT

Subject: Rigs

From mvjif Thu May 13 09:46 EDT 1993

From: mvubr!mvjif (James M Fitton +1 508 960 2577)

Status: R

Gang....

Scott....

At the QRP suite, Dayton, I had a chance to try the OHR W7EL kit with a OHR Switched Capacitor filter, and it was excellent. I mean excellent !!!

Tejas was represented at the suite, but I did not see the radios for comparison, this year, or last.

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from Far ckts.

I would recommend getting to Dayton.
At the QRP hospitality suite this year were;
MFJ, Howes, Kanga (G0BPS),
OHR, ARC 40, Tejas, Radiokit,
FAR Circuits, Gary Breed (K9AY),
Optomized XCVR (W7EL), W7Z0I,
and others, to talk to, try the rigs,
and ask questions of.

Jim, W1FMR

`p

From qrp-request@Think.COM Fri May 21 11:01:48 1993
Date: Fri, 21 May 93 11:01:40 EST
From: JENNINGS%UPAC01.VMS@UBSV01.abb.com
Subject: Rochester Hamfest

Hello QRPers,

Anybody going to the Rochester Hamfest today?

I'll be there at about 12:30.

73

Tom Jennings KV2X
jennings@abb.com

From qrp-request@Think.COM Wed May 19 18:14:59 1993
Date: Wed, 19 May 93 17:14:47 -0500
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: Schematic Update

Gang,

we're nearing the wire (for me) on this little project.

i've got the schematics for the hw-7, hw-8, hw-9, mfj (20m), ohr spirit,
ohr sprint, ten tec argosy 505, and am still looking for more.

purpose: to put them all together in one booklet. total pages to be
under 100 and trying to keep costs under \$5.00 per copy.

help.....

dit dit

Chuck Adams, K5FO @ 70+ wpm cw
adams@sgi.com

From qrp-request@Think.COM Thu May 20 23:01:42 1993
Date: Thu, 20 May 93 22:01:34 -0500
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: Schematics

since i'm dialed in long-distance (is this DX?) i thought i'd
post one more thing.

i am collecting for this group and/or those who may be interested
a collection of schematics on QRP rigs. reason: to have everything
in one place and to have schematics for those who get used rigs and
don't have the schematics. hard to repair, refurbish, or otherwise
work on a rig with no schematics. you and i don't have time to
reverse engineer every rig we get...

keep those cards and letters coming.... 72 de k5fo dit dit

Chuck Adams, K5FO @ 70+ wpm cw
adams@sgi.com

From qrp-request@Think.COM Fri May 28 09:52:05 1993
Date: Fri, 28 May 93 13:33:49 GMT
From: jkearman@arrl.org (Jim Kearman)
Subject: Seventy-niner QSO Party

Sorry I missed you, Bill (N8ET). I heard you calling, but you
were smack on top of a TV! I recorded some of the crud
surrounding VE2DRB. If ever I want to bore a crowd of QRPers
I'll play the tape. Unbelievable. Almost as bad as last week,
when everyone was watching "Cheers." When they start doing
Cheers reunions, I hope they pick another night!

Listening to all that buzzing and growling while trying to

pull through a weak signal may have been the closest any of us will come to experiencing the early days of spark, when receivers and transmitters were really "broadbanded." Maybe if I leave tiny Wouff Hongs laying around the neighbors will get the hint?

The second prototype 79er had an IRF-510 PA, and would put out 15 watts. I anticipated the kinds of problems we're having. I think QRP is great, but some folks might get frustrated if they can't make contacts. Then there are the showoffs who only run a watt or less.

VE2DRB was also the best signal here in central Connecticut. I doubled the length of my indoor antenna this week, which seems to have helped. As W1FMR points out, the DX antenna is no good for this contest; you need a high angle of radiation, around 40 degrees. Probably why my indoor aerial works as well as it does. Now, if I could just get the neighbors to read, listen to the radio or go to the movies on Thursday nights.

Ho-Jo Brandt (DJ1[?]ZB) had a VXO circuit in _Sprat_ that used several RF chokes in series with the crystal. The idea is, one big RF choke has too much self capacitance, but several smaller chokes in series have very little. Thus, you can achieve swings of several kilohertz. I started to try this with prototype #2 (prototype #1, based on the Universal QRP transmitter, went into #2), but #2 had conked out, and I haven't fixed it, yet.

It might be worthwhile to characterize several crystals as high, low and middle, and be able to stuff them in as needed. We're definitely experiencing the limitations of simple gear. Of course, 10 kHz away we'd have no problems.

BTW, the little crystals that Radio Shack sold will work in boatanchor transmitters. I hogged out the inside of an FT-243 holder and soldered one inside. I've used it in an EICO 720. I remember toasting a crystal in a 720 back in high school, so it runs some current through the rock.

For the next 79er party, I am going to use my DSP filter!

72,

Jim, KR1S

--

jkearman@arrl.org

From qrp-request@Think.COM Thu May 13 17:24:08 1993
From: jpo@acd4.acd.com (Jim Osburn)
Subject: Sidetone to an R1
Date: Thu, 13 May 93 15:39:14 EST

I'm building a rig with an R1 (August 92 QST) receiver board.
I would like to feed sidetone through the R1.
Could you look at the schematic and make a recommendation as to
where to feed in the sidetone?

Thanks,

Jim, WD9EYB

From qrp-request@Think.COM Thu May 13 18:25:30 1993
From: Stan Witherspoon <stan@hprstw.rose.hp.com>
Subject: Sidetone to an R1
Date: Thu, 13 May 93 15:25:24 PDT"

I am planning to add the sidetone to my R1 reciever at the same spot
that Rick Campbell add his sidetone to the R2, at the top of the 120mH
inductor (L7 in the R1 schematic) that is part of the 300 Hz low pass filter.
Rick reccomends in his article on the R2, that there be no DC offset in the
sidetone signal. I guess this is so the inductor isn't saturated by a DC
current.

Stan

--

```
~~~~~  
~      Stan Witherspoon           Hewlett-Packard Co.           ~  
~      (916) 785-5071             Systems Technology Division    ~  
~      stan@hprpcd.rose.hp.com     8020 Foothills Blvd.     Roseville, CA 95678  ~  
~~~~~
```

From qrp-request@Think.COM Fri May 14 09:40:19 1993
Date: Fri, 14 May 93 09:10:56 EDT
From: epacyna@auratek.com (Edward Pacyna)
Subject: Re: Sidetone to an R1

Its because L7 provides a direct DC path to ground, therefore AC coupling
must be used.

Ed W1AAZ

From qrp-request@Think.COM Fri May 14 10:33:45 1993

Date: Fri, 14 May 93 08:55:56 EDT
From: epacyna@auratek.com (Edward Pacyna)
Subject: Re: Sidetone to an R1

Jim

There is not much choice here. The sidetone needs to be connected to the noninverting input of the last audio amp. stage (U2B). You will probably need to limit the sidetone level as this stage has 35 dB of gain. You can not inject sidetone into U2A because the mute switch follows its output.

73's

Ed

From qrp-request@Think.COM Mon May 10 09:25:39 1993
Date: Fri, 07 May 93 17:56:33 GMT
From: jkearman@arrl.org (Jim Kearman)
Subject: Signing "/QRP"

Jim Reisert, AD1C, gave excellent advice, especially in regard to sending /QRP or saying "QRP" after your call. Some stations may acknowledge you, but most DX stations and contesters take a dim view of QRP. Surprised to hear that? They look at DXing or contesting with QRP the way Andretti would look at a VW Beetle in a Formula One race. Contesters and DXers tend to be hard-driving, competitive people, not laid-back flower smellers like QRPers! -----> :+} <-----

I've operated from outside the US and also at large contest stations in the US. My personal experience supports what Jim says. If your "QRP" will be audible, so will be your callsign.

Besides, if we're going to convince people that QRP is where it's at, we can't expect special favors--we have to make the playing field level and use our skills.

72,

Jim, KR1S

--

jkearman@arrl.org

```
> Jim Reisert, AD1C, gave excellent advice, especially in regard to
> sending /QRP or saying "QRP" after your call. Some stations may
> acknowledge you, but most DX stations and contesters take a dim
> view of QRP.
>
> Jim, KR1S
```

Certainly in contests using the qrp designator will slow you down more than it might be of any benefit. And with sharp operators in a pile-up its not necessary and slows them down...akin to the using the last two letters. If it does appear to work here, its probably more timing than anything else...the pile is down by the time "qrp" is sent.

72, Greg KD4HZ

From qrp-request@Think.COM Wed May 12 00:46:50 1993
Date: Tue, 11 May 1993 21:30:00 -0700 (PDT)

From: stark <mswmod@sage.unr.edu>
Subject: Re: Signing "/QRP"

On 11 May 1993 g-taylor4@tamu.edu wrote:

> > Jim Reisert, AD1C, gave excellent advice, especially in regard to
> > sending /QRP or saying "QRP" after your call. Some stations may
> > acknowledge you, but most DX stations and contesters take a dim
> > view of QRP.
> >
> > Jim, KR1S
>
> Generally agree, but to further the discussion by providing another
> opinion...Ade Weiss in the Joy of QRP, Chapter 6 - General Operating
> Techniques, Section I - Calling Strategy, Para (2) - Identify as QRP
> states "WORS P QRP works well. I have found the the de QRP instroduction is
> usually all it takes. The other station is psychologically prepared for a
> known prefix, and the 'de QRP' doesn't fit and alerts his attention"
> (p. 101).
>
> Certainly in contests using the qrp designator will slow you down more
> than it might be of any benefit. And with sharp operators in a pile-up its
> not necessary and slows them down...akin to the using the last two letters.
> If it does appear to work here, its probably more timing than anything
> else...the pile is down by the time "qrp" is sent.
>
> However, I have known using the qrp designator to work when nothing else
> seems to. While I wouldn't use it as a general practice neither would I
> totally exclude it from an operating "bag of tricks" to be tried in the
> appropriate situationlike if I realllly need the multiplier and
> nothing else works.
>
> 72, Greg KD4HZ
>

Hi all,

Well, I tend to use /qrp all the time. The big reason for that
is to try and get the other station to log it that way. I like
to see the /qrp on the qsl.

When you are working operators like z11amo, oh2bn etc, it doesn't
make much difference. Most of the time if you do your homework
you can get them.

During contests I like to use /qrp in an effort to hold a freq.

I keep thinking that there are a few who will not feel good about pushing a qrp station off.

But there are times when I don't do it. So I guess it all boils down to doing what feels right.

Always remember that we have two ears and one mouth. That means we should listen twice as much as we talk!

73s & cul

Ron, KU7Y

From qrp-request@Think.COM Sun May 9 11:35:52 1993
Date: Sun, 9 May 93 10:35:44 -0500
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: six meters

Gang,

andrews@fmsystm.ncoast.org (Andrew Sargent N80FS) posted note about six meter freqs. some of you guys on the net, Ed Hare, who work up there in the infrared to ultraviolet freqs (:-) might let us know. i checked back issues of QQ and can't find 6 meters listed and i'll look again when i get to houston tonite.

in "Low Power Communications" by Rich Arland, K7YHA, Vol 1 - QRP Basics, these are confirmed. but rich got a lot of flack in the review article on his book last year and he flamed back in QQ. i've written books too and i know how difficult it is to prevent error, but his book did have too many typos for a finished product and glaring errors.....

Andrew, don't ever apologize or degrade yourself in this group being a no-code tech. i am one of the top 10 fastest people in the world on cw. i spent almost 35 years doing cw, most of that time listening. you and nobody else in this world has seen or heard me say anything about no-code, positive or negative. period.

SOAPBOX: (flame suite on) as a QRPper i am against the bands getting more crowded at 50Mhz and below. commercial freqs are in demand at 200MHz and above. antenna size and all that. i guess we need body count to keep 'em, but if we start fighting among ourselves we ARE going to lose more. most QRPers are cw ops, it's the easiest rig to build, cheap, etc. SSB homebrew rigs are done, some on the group

have said this, but there aren't that many. the kits are cw. heath went outta business.....

just don't anyone try to move me or take away 40, 30, and 20 meters. at 2 watts, i wanna be able to talk to my cousins in europe and the rest of the world. i can't do that at higher freqs without a satellite, at least frequently enough. they can take my benchner or heath keyboard from my cold dead hands!! HI ;-)

SOAPBOX OFF: take the code wars back to rec.radio.misc (.policy).

additional note: when i first started the code, i learned via audio. i can not easily read dots and dashes and refuse to do so. to even know dots and dashes will permanently keep your top speed on cw under 25 wpm.. INMH0

ok, back to net control.....

72 de k5fo dit dit

thought: with the advanced performance and sensitivity of receivers WHY do people want to keep raising the power limit. i remember when it was 1KW, now is 1.5KW and somebody filed petition to do 1.5KW AM? what's wrong with this picture gang?

Chuck Adams, K5F0 @ 70+ wpm cw
adams@sgi.com

From qrp-request@Think.COM Sun May 9 20:50:40 1993
Date: Sun, 9 May 1993 17:38:09 -0700 (PDT)
From: stark <mswmod@sage.unr.edu>
Subject: Re: six meters

Hi all,

Just want to add that I too feel that this is no place for any pro/anti CW noise.

I work only CW because that is what I enjoy. My hope is that we will always have CW sub bands.

My goal is to get to 50 wpm while chatting. Have been close, but not quite there yet.

Would like to mention that I have been doing CW for over 40 years, and like Chuck said, most of that time listing. Am now mobil cw. If any of you have never tried that, you should. It makes you copy in your head and remember things like names, calls etc.

I will be driving to Idaho on thursday am if anyone is needing any of the counties that I will be going through. Will take I-80 east to US 95. Then north to Boise.

Will start out on 40 mtrs around 7050. Will also be glad to slow down to what ever anyone wants. Very noisy in the cities, but may be ok on the road.

And Chuck, how do you keep a fast pace with a keyer? I have been watched at 43 wpm by W7PCP who was using his computer. But I couldn't send very long at that rate. Started getting too many errors. Maybe it's from spending too much time consting. Been inactive for the last 2 years, but now up and running.

Hope to see you all soon,

Ron, KU7Y

(Yes Yes, I know. Monte is my first name, but I always used my middle name of Ronnie when I was a kid. So on the air it was Ron. But I really don't care what you call me as long as it's in time for dinner.)

From qrp-request@Think.COM Mon May 10 01:15:24 1993
Date: Sun, 9 May 93 22:15:18 PDT
From: paulb@harley.tti.com (Paul Blumstein)
Subject: Re: six meters

Ron writes:

+My goal is to get to 50 wpm while chatting. Have been close, but +not quite there yet.

The problem with being able to send so fast is that it limits the number of people who you could talk to.

73 de kd6laa/qrs

From qrp-request@Think.COM Tue May 11 16:41:20 1993
Date: Tue, 11 May 93 14:38:00 EDT
From: epacyna@auratek.com (Edward Pacyna)

Subject: Some Homebrew Receiver Ideas

Attached is a note that I put together a while back regarding building some simple but high performance receivers that I thought might be of interest to QRPers.

There has been a fair amount of interest from my original posting on building high performance, simple HF receivers, compact low cost receivers. Following is additional information that has been requested.

The Micro 20M receiver was originally published in Ham Radio Magazine, Feb. 1988. FAR Circuits made a PC board (1 1/2" X 3", ~\$5). Contact info is FAR Circuits, 18N640 Field Court, Dundee, Ill 60118.

The author for the Micro 20 published two transceivers (using this receiver).

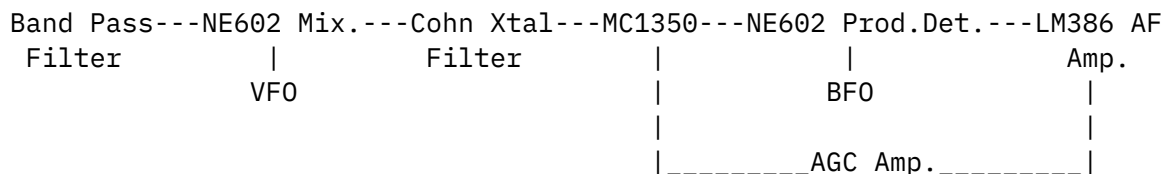
1. NE 602 Based 20M QRP Transmitter, Ham Radio Jan. 1989

2. QRP 15 Transceiver, CQ Sept. 1990

Note: The MFJ line of QRP transceivers are basically the above transceivers.

The Micro 20 also has audio derived agc (see below). Its good for SSB, but due to loop response of audio signals, its attack time is slow and tends to pop on attack. For CW rigs, I don't include it and just use a voltage divider circuit with a potentiometer, the wiper through a 10K series resistor supplies 5V (max) to 12V (min) to the MC 1350 agc pin (5).

For those who might want to SWL, the NE602 Product Det/BFO can be replaced with a envelope detector (a diode).



Following is a variation. The IF amp is eliminated and replaced with a AF preamp. The advantages are:

1. Better dynamic range due to less signal at the Prod. Det. stage. NE 602's can get bashed and be careful when using them as a transmit mixer.
2. Circuit also shows a different AF power amp. The MC34119 was designed for low voltage circuits. It has less audio distortion and you shape its band pass with external R's & C's to be optimized for communication audio. See Motorola data sheet.

```

Band Pass---NE602 Mix---Cohn Xtal---NE602 Prod.Det.---NE5534---MC34119 AF
Filter          |          Filter          |          Pre Amp      Amp.
                VFO                BFO

```

Should be able to build a portable receiver (6V battery,shirt pocket size) with this design.

Either of the above circuits and easily be made into a simple switch selectable multi-band unit by using another NE 602 to premix the VFO/Xtal oscillator to generate a new stable VFO to feed the first mixer.

```

Band Pass---NE602 Mix--- Same as one of above
                |
                Band Pass Fil.  -|
                |                |
VFO-----NE602 Pre Mix.  |      New
                |      Note: diode switch
                |      xtal's for multiband
                Xtal Osc.  -|

```

The NE602 is a double balanced mixer with on board oscillator and buffer in a 8 pin dip package and requires only a handful of external parts. Its made by Signetics and cost about \$2. Its built for low power use (i.e. 6V @ 2.5 ma).

73's
Ed Pacyna W1AAZ

From qrp-request@Think.COM Mon May 24 01:28:34 1993
Date: Sun, 23 May 93 22:27:01 PDT
From: dh@deneb.csustan.edu (Doug Hendricks)
Subject: Spider Kit Finished

I spent this weekend finishing up my Spider SP-1 kit that Jim, WA6GER, wrote the review on last week and I uploaded. Well, guys, I got it done at 9:00 tonight, and this one is easy to tweak and get working. It worked the first time I tried it, and as I was adjusting the receiver by tuning a coil, I decided to call a CQ. Imagine my surprise when I called CQ twice followed by my call once, not really expecting an answer, and boom! here comes my call back. I had a 25 minute ragchew with a guy in Walnut Creek, Ca. Yeah, I know it isn't very far, but hey, if you could see the closet full of failures that I have for building projects, you would understand my joy at making a contact on a rig that I built.

The NN1G rig is still not tweaked. Bill Kelsey is going to look over the schematic this weekend and hopefully he will be able to give me a hand. Please, if you write an article for QRP Quarterly or other journals, don't

assume that all of us are as smart as you are. Give us the info on how to go about tweaking and tuning up the rig. It will be appreciated. Chuck Adams and I are working on a project that most of you will be interested in. We will announce it when we have the details worked out. Stay tuned. 72,
Doug

From qrp-request@Think.COM Wed May 26 10:59:13 1993
Date: Wed, 26 May 93 10:56:47 EDT
From: Frank.Milos@East.Sun.COM (Frank Milos - Sun USOPS CSU Manufacturing Engineering)
Subject: Summary for Q-dope responses

Thank you all for your responses to my question about Q-dope! It looks like other than Q-dope, nail polish and polyurethane are suitable substitutes. Also if your toroids are tightly wound, you may not need anything. But recommendations indicated you should secure the windings on the VFO toroid.

I have summarized everyone's responses below in case there are others who would like to know what to use.

BTW, I think this forum is great for sharing experiences and questions. It has been very informative for me! Thanks!!!

72

Frank - N01E

Edward Pacyna...

I very seldom use Q dope (typically don't need it). If I'm winding a torid, I wind it tight and never use Q dope. If the torid is a VFO inductor, I use nylon screws, washers and nuts to mount the torid and to keep anything from moving. On a solenoid inductor I'll use some if its for a VFO tuned circuit.

It's a clear liquid (a bit viscous) with particles of polystyrene suspended in it. You Do It Electronics in Needham sells it. Finger nail polish (clear) would probably be OK.

[illegible]

I've heard that many use clear nail polish.

[illegible]

From qrp-request@Think.COM Wed May 19 12:37:22 1993
Date: Wed, 19 May 1993 11:37:31 -0500 (CDT)
From: "Jeff M. Gold" <JMG@tntech.edu>
Subject: transistors

Anyone know where I might be able to get hold of a single PT5741 transistor (power transistor for Ten Tec 405 amp) or equivilent. RF has them but.. has \$20 min. order.

thanks

73

Jeff,AC4HF

From qrp-request@Think.COM Wed May 26 14:45:55 1993
Date: Wed, 26 May 93 14:24:23 EDT
From: epacyna@auratek.com (Edward Pacyna)
Subject: Tuning up the 20M Xcvr from 1/93 Quarterly

A couple of days back, someone asked how to tune up the 20M transceiver that was published in the January issue of QRP Quarterly. Sorry about such a wide distribution, but I can't remember who asked.

The first step would be to set the VFO to operate on the right frequency. This will not be easy because there are no adjustments here. A small variable capacitor (or a variable inductor) should have been made a part of the tuned circuit in order to set up the frequency correctly. The received frequency will be the VFO plus the I.F. frequency. So for 20M's the VFO should start at 4.0 Mhz and tune to a higher frequency. So if the VFO tunes from 4.0 to 4.1Mhz, your receiver will hear 14.0 to 14.1Mhz. Measure what frequency your VFO tunes (you can use a frequency counter but make sure it doesn't load and pull the circuit off frequency, or use a seperate calibrated receiver). If your VFO doesn't begin at 4.0Mhz you need to get it there or you'll wind up transmitting below 14.0 Mhz or miss a segment of the band you want. Given no adjustments here, your going to have to change the value of the inductor (compress/expand/add/subtract turns) or the fixed capacitor (lower value/pad with parallel C etc.).

After your VFO is set up, connect a 50 ohm antenna and tune in a signal near Adjust both slugs of the band pass filter (between antenna and Rx mixer) for a signal peak. Go back and forth a couple times as there will be some slight interaction in these adjustments.

Next adjust the I.F. transformer for a peaked signal response.

Now the BFO needs to be set on the proper xtal filter slope such that you get an audio note of the proper frequency, and single signal reception on the the

correct sideband. Given the frequency plan of this receiver, USB will be heard when the BFO is set on the lower filter slope. Set the variable C such that when you tune across a signal (VFO going from low to higher frequency) the louder signal is heard before reaching zero beat (and the signal on the other side is much weaker). If there is not enough tuning range to reach the lower slope, for CW it's OK to set the BFO on the upper slope, but SSB signals will not be intelligible. Carefully adjust to get the audio note you want while eliminating as much of the opposite sideband as possible.

I don't recall the receiver as having AGC, so this should complete the receiver adjustments.

The transmitter also has a band pass filter (between the mixer and the driver stage). It should be carefully adjusted for a 14MHz band pass as the mixer puts out a lot of different frequencies. Put a 50 ohm dummy load on the antenna connector and peak both of these inductors a couple of times. Check to be sure the transmitter is putting out energy on 14MHz (e.g. use a scope, wave meter, or even a frequency counter).

Last step is to set the oscillator (that's part of the transmit mixer) to the correct frequency in order to produce the desired off-set when transmitting (i.e. 700 Hz). If you set up the Rx for USB this will be frequency will be 700 Hz higher than the BFO frequency. Tune in the same signal with your transceiver and on a second receiver. Now tune the this receiver to zero beat. Key the transceiver and while adjusting the variable C for zero beat (on the second receiver). As a check, tune the transceiver and the second receiver to some signal. If you key the transceiver, your transmitter should be on the same frequency (same beat note) as the received signal. Your side tone should also be this same audio frequency.

That's about it. Let me know if you have any questions.

73's

Ed W1AAZ

From qrp-request@Think.COM Mon May 10 09:36:27 1993
From: J. Sherwood Williams <jwill@cabell.vcu.edu>
Subject: Twinlead Folded Dipoles.
Date: Mon, 10 May 93 9:36:20 EDT

Well,

I have now given up on the twinlead dipole as detailed in the ARRL

Handbook and Antenna Handbook. They just don't yeild a low SWR. I even tried drooping it in an inverted V : It didn't help. In fact, nothing seems to help. I went back and recalculated the dimensions from formulas and the antennas are quite close to their calculted values vs the values given in the tables... The only thing I didn't try was recalculating the matching section on the feedline: I relly don't have formulas for the capacitor values.

Anyway, I guess I can use the twinlead for several 2 Meter J-Pole antennas and a matching stub or two :-)

Robert S. Williams

From qrp-request@Think.COM Wed May 26 14:56:18 1993
Date: Wed, 26 May 1993 11:59:49 -0800
From: burdick@interval.com (Wayne Burdick)
Subject: VFO stability

Thought I'd share a little VFO-building experience.

I built a plain vanilla parallel-tuned Colpitts VFO for 2.915-3.015 MHz. I figured that range was low enough that I could get away with a cheap Toko type 10EZ slug-tuned inductor (from Digikey) and still have reasonable temperature stability.

As it turned out, the VFO had unacceptable drift during the first five minutes--something like 300Hz--and too much short-term "hunting" around.

I replaced the Toko coil with a T-50-7 toroid. There had been some discussion here about the temperature stability of these cores. The -7 material is the best in that regard that Micrometals makes, at 30PPM/degree C, and is just a bit better than the -6 material at 35 PPM/degree C.

Anyway, the T-50-7 worked quite well, eliminating the drift completely. I highly recommend avoiding the particular Toko coils I mentioned.

One thing that I haven't measured is how the change in Q of the coil with temperature affects frequency stability. According to the Micrometals RF application manual, the -7 material Q will change at 900PPM/degree C, which sounds high compared to the inductance change with temperature. But since the loaded Q is a bit lower in the circuit, any drift due to Q change may be a floor effect.

73,
Wayne N6KR

Wayne Burdick
wayne@interval.com
(415) 354-0928

Interval Research Corp.
1801-C Page Mill Road
Palo Alto, CA 94304

From qrp-request@Think.COM Wed May 26 16:12:59 1993
From: Kevin Purcell (Rho) <a-kevinp@microsoft.com>
Date: Wed, 26 May 93 13:10:17 PDT
Subject: RE: VFO stability

Wayne was worrying about the Q of a inductor made on a -7 toroid would change by 900ppm/degree C would have some effect on the VFO.

Well 900ppm per degree C. Say we have a Q=500 and change the temperature by 100 degrees then the Q will drop by 18. Not a big change. Hmmm, I don;t think you should worry about it.

72

Kevin Purcell N7WIM / G8UDP
a-kevinp@microsoft.com

"So much is happening in the world of electronics, but it appears to me that we QRPers are twenty years behind in the analog age."

-- QRP Quarterly Editorial, April 1993

From qrp-request@Think.COM Mon May 10 11:40:05 1993
Date: Mon, 10 May 1993 10:23:00 +0000
From: "Michael (W.M.) Babineau" <babineau@bnr.ca>
Subject: re:HW-8 VFO

In message "HW-8 VFO", rar3h@phil.cs.virginia.edu writes:

>
>
> Has anyone ever noticed how accurate the tuning dial on an HW-8 is? When compared to a calibrated
> receiver, the HW-8 is +/- 5KHZ. Is this about right from your observations?

>
>
> Bob Ross WA2MFI
> rar3h@virginia.edu
>

This seems to be about right. I have an additional problem, that the tuning at the bottom of the scale is not linear (ie the frequency goes up for a while then starts to go down) due to a slightly defective tuning capacitor. This is only a problem at the bottom end of the scale so I adjusted the rig so that the capacitor hits the stop right at the 250Khz mark rather than going beyond it ... I just have to watch out that I stay inband at the bottom.

Michael, VE3WMB